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ABSTRACT

The nation's Governors resolved to lead restructuring efforts in their states as part of their commitment to achieve the national education goals by the year 2000. States are experimenting with a range of approaches to restructuring, depending on their resources, demographics, governance structures, and traditions. This report describes states' progress in restructuring education at the beginning stages. The first section discusses what restructuring means and how states are meeting the challenge of linking together changes in several parts of the system. The report then looks at examples of strategies under way and progress in overcoming major barriers. Among the lessons learned from recent state experience is that states must create strategies for sustaining commitment beyond policymakers' terms of office. Appendices contain the following: (1) national education goals and objectives; (2) restructuring frameworks; and (3) a brief overview of the approach each state has taken to improve its education system. (MLF)

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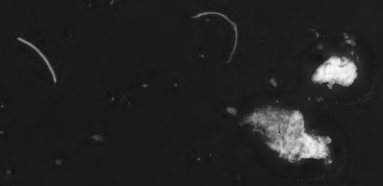
From

Rhetoric To Action

State Progress in Restructuring the Education System



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National Governors' Association

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"The time

for rhetoric

is past; the

time for

performance

is now."

From Rhetoric to Action

State Progress in Restructuring the Education System

National Governors' Association

The National Governors' Association, founded in 1908 as the National Governors' Conference, is the instrument through which the nation's Governors collectively influence the development and implementation of national policy and apply creative leadership to state issues. The association's members are the Governors of the fifty states, the commonwealths of the Northern Mariana Islands and Puerto Rico, and the territories of American Samoa, Guam, and the Virgin Islands.

The association has seven standing committees on major issues: Agriculture and Rural Development, Economic Development and Technological Innovation, Energy and Environment, Human Resources, International Trade and Foreign Relations, Justice and Public Safety, and Transportation, Commerce, and Communications. Subcommittees and task forces that focus on principal concerns of the Governors operate within this framework.

The association works closely with the administration and Congress on state-federal policy issues from its offices in the Hall of the States in Washington, D.C. The association serves as a vehicle for sharing knowledge of innovative programs among the states and provides technical assistance and consultant services to Governors on a wide range of management and policy issues. The Center for Policy Research serves the Governors by undertaking demonstration projects and providing anticipatory research on important policy issues.

Publication design by Wayne Pederson.

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Foreword

Following the historic 1989 Education Summit in Charlottesville, Virginia, the Governors and President Bush created and adopted six ambitious performance goals for the nation. To achieve the goals by the year 2000, the Governors committed themselves to restructuring the education system in every state.

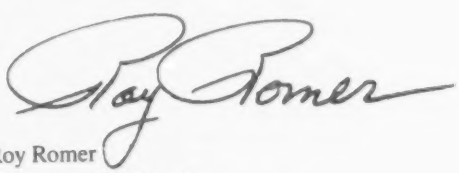
NGA's Task Force on Education reinforced the need for restructuring in its 1990 report, *Educating America: State Strategies for Achieving the National Education Goals*. It stated, "We cannot continue to tinker with an educational machine whose fundamental design is defective. More resources may be necessary, but money alone will not stave off continuing failure if the system remains unchanged. Instead, fundamental and dramatic changes in the very design and structure of the education system must be made."

From Rhetoric to Action: State Progress in Restructuring the Education System is the first report to look across all states and chronicle what we are learning. There are exciting initiatives that have resulted in high-performance schools and classrooms across the country. We need many more examples of innovation and reform to serve as models for educators. But systemwide change is essential. Our challenge as Governors is to restructure the entire system to substantially raise the performance of *all* children and *all* schools in order to achieve the national education goals.

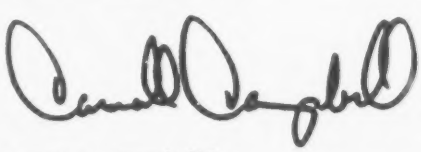
Across the country, there is bipartisan consensus about the need for fundamental change. Governors from both parties are launching major restructuring efforts. Yet public support lags. Too many of our constituents are satisfied with their own schools. They do not fully recognize that even many of our best schools are producing graduates whose performance falls short when measured against international standards.

The National Education Goals Panel, established by the Governors and the administration to monitor progress toward achieving the national education goals, will provide more accurate information to parents and students over the next several years. Such information will powerfully communicate where we are and where we need to be.

But measurement and assessment alone are not enough. We must mobilize for immediate and sustained action in each state and community to create a world-class education system for the twenty-first century. As the joint statement issued at the summit declared, "The time for rhetoric is past; the time for performance is now."



Roy Romer
Governor of Colorado
NGA Co-Lead Governor on Education



Carroll A. Campbell Jr.
Governor of South Carolina
NGA Co-Lead Governor on Education

Executive Summary

The nation's Governors resolved to lead restructuring efforts in their states as part of their commitment to achieve the national education goals by the year 2000. To transform an institution that has remained essentially the same for more than a century is an awesome challenge. Yet the need is clear. In today's world, economic competitiveness and a viable democracy require more from educators and students than the current system can deliver. As state leaders confront the enormity of the task of restructuring an entire system, they enter uncharted territory, learning as they proceed.

There are signs of progress along a number of fronts. The sheer number of people involved in policy discussions about restructuring has increased dramatically. Local and state policymakers and educators have begun to grapple with exceedingly complex issues that range from setting standards to creating new forms of accountability.

There is a striking shift in the language of the debate from mandated procedures to performance-based outcomes and from school improvement to systemic restructuring. The phrases "all students can learn at high levels" and "what students know and are able to do" are commonly heard across the country and signal a new way of thinking. The first embodies a new conception of equity—that all students must receive a quality education, including the necessary services to prepare them for school. The second reflects a shift to performance outcomes—not simply paper-and-pencil exercises.

Issues of national standards and assessment, never before on the table, have been put forward by the National Education Goals Panel and have been incorporated in President Bush's national education strategy, "America 2000."

States are taking steps to develop new curriculum and assessment instruments that capture more challenging learning goals. They are stimulating experimentation through grants and pilot programs. They are reorienting the mission and roles of state departments of education. State and business leaders are collaborating to find ways to transform the education system into a high-performance organization.

But there is a long way to go. While every state can point to examples of exciting new ventures, much of what is called restructuring reflects improvement in only one small part of the system. And few of these changes represent radical departures from the status quo. The lack of boldness results, in part, from minimal public support for sweeping change. Transforming the education system requires the support of the whole society—to ensure that all children are able to benefit from school and to prepare the workforce for new roles and responsibilities.

With a clearer sense of the magnitude of the task, Governors recognize the need for long-range strategic planning and management. They see the need for creative thinking about how to reorganize the entire system in fundamental ways, not simply to strengthen a few of its parts. The first steps have been positive; they have dramatized the need to move from small-scale efforts to systemic change.

States are experimenting with a range of approaches to restructuring, depending on their resources, demographics, governance structures, and traditions. Clearly, there is no one best way. Yet, many states are encountering the same challenges as they pursue their restructuring agendas: how to create and maintain political and financial support for long-term goals, how to move on multiple parts of the system at the same time, how to manage a complex process that extends beyond Governors' terms of office, and how to measure progress along the way.

This report describes states' progress in restructuring education at the beginning stages. It focuses on elementary and secondary education and therefore only touches on the equally critical areas of preparing children for school and coordinating health and social service delivery to support students and their

families. The first section of this report discusses what restructuring means and how states are meeting the challenge of linking together changes in several parts of the system. The report then looks at examples of strategies underway and progress in overcoming major barriers. The following lessons, which are highlighted throughout the report, emerge from recent state experience.

- Budget shortfalls provide an opportunity to rethink the way the education system operates.

- To support restructuring, people need concrete images of successful practices and clearly defined high standards against which to gauge where their schools are.

- Because restructuring is a long-term process, states must create strategies for sustaining commitment beyond policymakers' terms of office.

- An outcome-based system cannot lead to higher performance unless the goals go beyond minimum competencies.

- Assessment must be based on challenging curriculum standards to pressure the system to improve.

- Professional development for teachers and administrators must be totally transformed from the narrow conception of workshops and courses to a range of opportunities built into the job for continuous learning and improvement.

- States can transform teacher and administrator preparation by redesigning licensing and certification.

- The long-term value of a pilot program depends on whether the system has changed in ways that support successful innovation in *all* schools.

- State grants and other incentives for improvement must focus on both school practices and district practices.

- Restructuring education requires new roles for parents and community members as well as professionals.

- Deregulation is a more powerful strategy than a waiver option; innovation requires deregulation plus mechanisms for providing extensive staff development.

- The benefits of decentralization are realized only when school faculties have the additional time and training needed to carry out their new responsibilities.

- States must press decentralizing districts to provide the necessary leadership and support for schools to change.

- Rewards and sanctions can stimulate change when used appropriately; they can undermine improvement when based on ill-conceived definitions of success and failure.

- Downsizing a state department of education, reorganizing divisions, and adding or subtracting regional offices are not the same as restructuring unless they involve designing new roles and retraining state staff.

- Experimentation with new staffing patterns is needed to address quantity and quality problems in the teaching profession.

- The real challenge is to change the structures in the system that reinforce the status quo and stifle the spread of innovation.

What Does Restructuring Really Mean?

Restructuring the public education system means fundamentally changing the way schools, districts, and state agencies are organized and do business in order to significantly raise the performance of all students, from potential dropouts to those who are college bound. To paraphrase the description of restructuring in the National Education Goals Statement: All students, regardless of background or disability, must be engaged in rigorous programs of instruction that ensure the acquisition of knowledge and skills necessary to succeed in a changing economy. To accomplish this, the public education system must be totally redesigned to focus on results demonstrating high performance, not procedures; to increase the skills, flexibility, and discretion of school faculties; to provide powerful incentives for improvement and real consequences for persistent failure; and to cause parents to take more responsibility for their children's education.

Features of a High-Performance Education System

There are numerous lists of critical components, strategies, and conceptual frameworks designed to help guide state restructuring efforts. Contributors to this enterprise include the National Governors' Association, The Business Roundtable, the Center for Policy Research in Education, the Education Commission of the States, and the National Center on Education and the Economy. (See Appendix B.) Although details and strategies may vary, these different conceptions of restructuring, and each state's own version, share a core of basic operating assumptions, including:

- The goal of restructuring the education system is to ensure that all children reach high performance standards.

- Restructuring refers to systemic change in which many pieces and levels of the education system and supporting systems, including preschool and basic health services, must be transformed and linked for the system to become effective.

- Restructuring education aims to create a performance-based system in which school faculties have the knowledge, authority, and resources to make instructionally relevant decisions in exchange for real accountability for results.

- In a restructured system, challenging goals for the performance for all students are reflected in a demanding curriculum and corresponding meaningful assessments of performance.

- Restructuring the system requires that professional preparation and ongoing learning be fundamentally redesigned to prepare current and future administrators and teachers for the new curriculum and their new roles.

The various characterizations of restructuring also share a dynamic and flexible character that is essential to the process of restructuring the system. State leaders are inventing as they go along, creating mechanisms that allow the system to adapt to changing circumstances and to ensure continuous improvement.

States use different strategies for translating these assumptions into actions. Some focus on legislation, others on leadership and incentives, others on administrative policies and programs. Strategies and components are amended, added to, and refined as new lessons emerge.

Which Pieces Must Change

Restructuring the education system to dramatically raise student performance requires action at every level. State leaders recognize that restructuring is not piecemeal reform. It is systemic reform that acknowledges the complexity of fundamentally changing the ways schools, districts, and state

agencies are organized. Like a jigsaw puzzle, the multiple pieces and levels of the education system are interlocking and must all change together.

Inside schools, curriculum and instruction must change to engage all students in challenging activities. Curriculum must shift from fragmented, superficial coverage of material to emphasize application of skills, deep understanding, and practical knowledge. Schedules and grouping must be flexible so that teams of teachers can adapt instructional strategies to individual students and tasks. Teachers, administrators, and parents must have the authority, flexibility, and time to make decisions appropriate to each situation, an efficient means for making decisions, and the skills and knowledge to do so wisely. (See *School-Level Restructuring*.)

For school faculties to change the way they organize and carry out instructional activities, they need ongoing access to information and professional development. They need the knowledge and skills to teach new curricula in new ways and to take on new roles as team members and leaders, peer coaches, and decisionmakers. Effective activities include intensive summer institutes, school-based assistance, and time to learn. Such massive retraining cannot occur effectively without simultaneously rethinking how schools are staffed, how time is allocated, and how staff development is conceived.

Instead of generating and enforcing rules, district leaders and staff must provide authority and flexibility to school staff. This requires an analysis of which decisions are best made centrally and which are best made at the school level—choices that will be different for each district. Districts must also help schools meet high performance standards. This requires districts to restructure their central office staffs to better lead and support schools with assistance and professional development opportunities. Districts must be able to respond on request to the individual needs of each school or allow schools to seek assistance from other providers.

Districts must also build strong support structures including mechanisms for attracting and supporting new talented teachers. They must develop communications and data systems that ensure a two-way information flow between central offices and schools for decisions about personnel, finance, and evaluation. Collective bargaining for teachers and administrators must go beyond salaries, seniority, and how time is spent to allow for more flexible arrangements in schools. Issues related to support for school improvement, authority, and professional discretion can be negotiated through collective bargaining or through trust agreements and other nonadversarial means.

District leaders must make long-term commitments to comprehensive change and build the new alliances necessary to make such change a reality. District goals must focus on ensuring that all students receive a challenging curriculum and must be supported by assessment instruments that measure applied skills and problemsolving, not only facts and algorithms.

States must spearhead the process of restructuring by creating the political conditions that support change, setting challenging standards for student performance, stimulating district and school innovation, and creating new accountability systems. Effective accountability systems must rest on measures of deep knowledge and understanding, not minimum competencies. They must carry incentives for success and consequences for failing to improve. This agenda requires redefining the roles and expanding the capacity of state education department staff to shift from monitoring compliance to providing support and assistance. Professional preparation for teachers and administrators must change so that incoming educators are able to take on these new demanding roles. This requires new relationships among state agencies, including universities, as well as mechanisms for maintaining a focus on restructuring beyond single terms of office.

School-Level Restructuring

The Saturn School of Tomorrow in St. Paul serves grades four to seven and will add grade eight. Saturn staff and parents helped design the school, which was converted from a YWCA building, and created an environment far removed from a traditional egg-crate building. Each room has a particular purpose or function—science, art, writing, computer science, or project work—and is wired for video and computer networks. The school has a rich array of technology that facilitates individualized learning and expression, group interaction, knowledge production, and management of learning. Working independently and in cooperative teams, students have a "Personal Growth Plan" and a "Portfolio of Proficiencies." The staff create courses to achieve goals from these plans. Students can register for these courses regardless of their grade level.

There are no first-grade teachers or fourth-grade students at Wheeler Elementary School in Louisville, Kentucky. The school has completely eliminated grade levels and replaced them with primary and upper-grade teams of teachers and ungraded groups of students who stay together for roughly three years. This provides considerable flexibility in organizing students for different activities. Students can move to upper-grade teams as they are ready. Some may be ready three months into their third year of school; others may be ready three months into their fourth year. Some may join an upper-grade team for language arts activities and remain with their primary team for math and science. The opportunity to stay with the same teachers for several years, to move at one's own pace, and to work with students of different ages creates a far more effective learning environment for students and teachers alike.

At Pasadena (California) High School, a member of the Coalition of Essential Schools, all freshmen and sophomores follow a morning schedule unlike that of most large urban secondary schools. There are no tracks or differentiated curricula. Students have two basic teachers—a humanities teacher and a math and science teacher. They meet in the same heterogeneous student groups with each teacher for an hour and a half. The teachers plan together and often create themes that cut across their subject areas, unifying mornings into three-hour blocks.

In Olympia, Washington, an alternative high school combines seminars and independent study, which enables students to complete a typical high school course in three weeks. Students meet daily in small groups for an hour-and-a-half seminar and then work on their own to complete the assigned work under a contract worked out with the teacher. The school also houses an infant center and a day care center, which are set up through interagency contract.

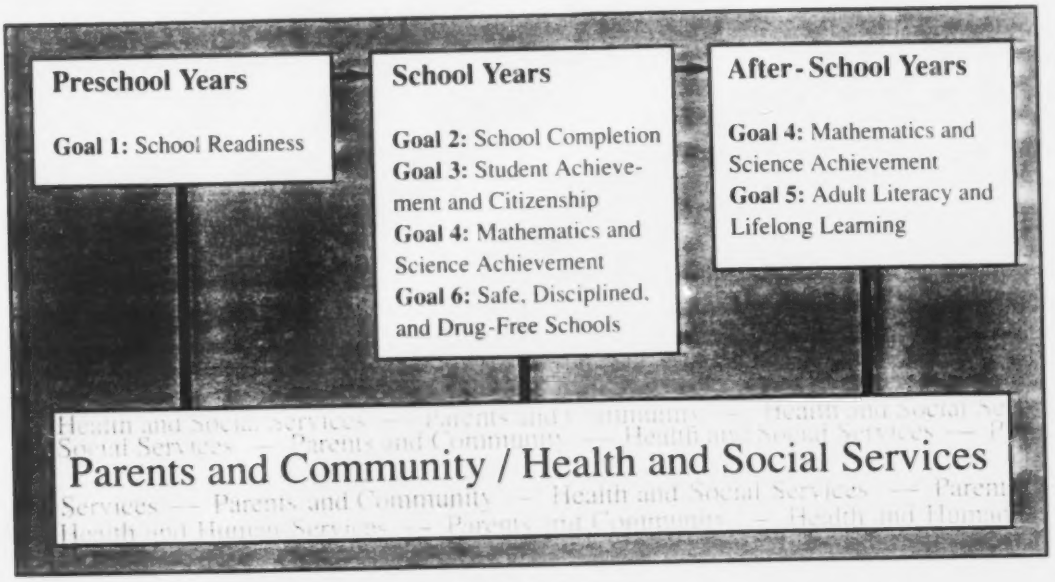
Governors are well positioned to play a major role in facilitating coordination among education providers and the various providers of health and social services. These and other critical state actions leading restructuring are the subject of the rest of this report.

How the Pieces Are Linked

Whatever their differences, every description of restructuring emphasizes an overriding central theme: Systemic change requires redesigning all the pieces in a coordinated, coherent fashion. Changing multiple parts of the system at once—especially with limited resources—is proving extremely difficult. Nevertheless, it is clear that without a strategy that will result in a set of coordinated policies, the system cannot significantly improve.

Some states have been able to link several pieces, but most are working on them as separate parts of the system. Although there are a vast number of interrelationships among all the pieces of the education system, there are four sets of linkages that

Figure 1: The National Education Goals Linkages


Preschool Years
Goal 1: School Readiness
School Years
Goal 2: School Completion
Goal 3: Student Achievement and Citizenship
Goal 4: Mathematics and Science Achievement
Goal 6: Safe, Disciplined, and Drug-Free Schools
After-School Years
Goal 4: Mathematics and Science Achievement
Goal 5: Adult Literacy and Lifelong Learning
Parents and Community / Health and Social Services

Note: See Appendix A for full text of the National Education Goals.

are of primary importance. (See Figure 1: *The National Education Goals Linkages* and Figure 2: *The Critical Linkages for the School Years*.)

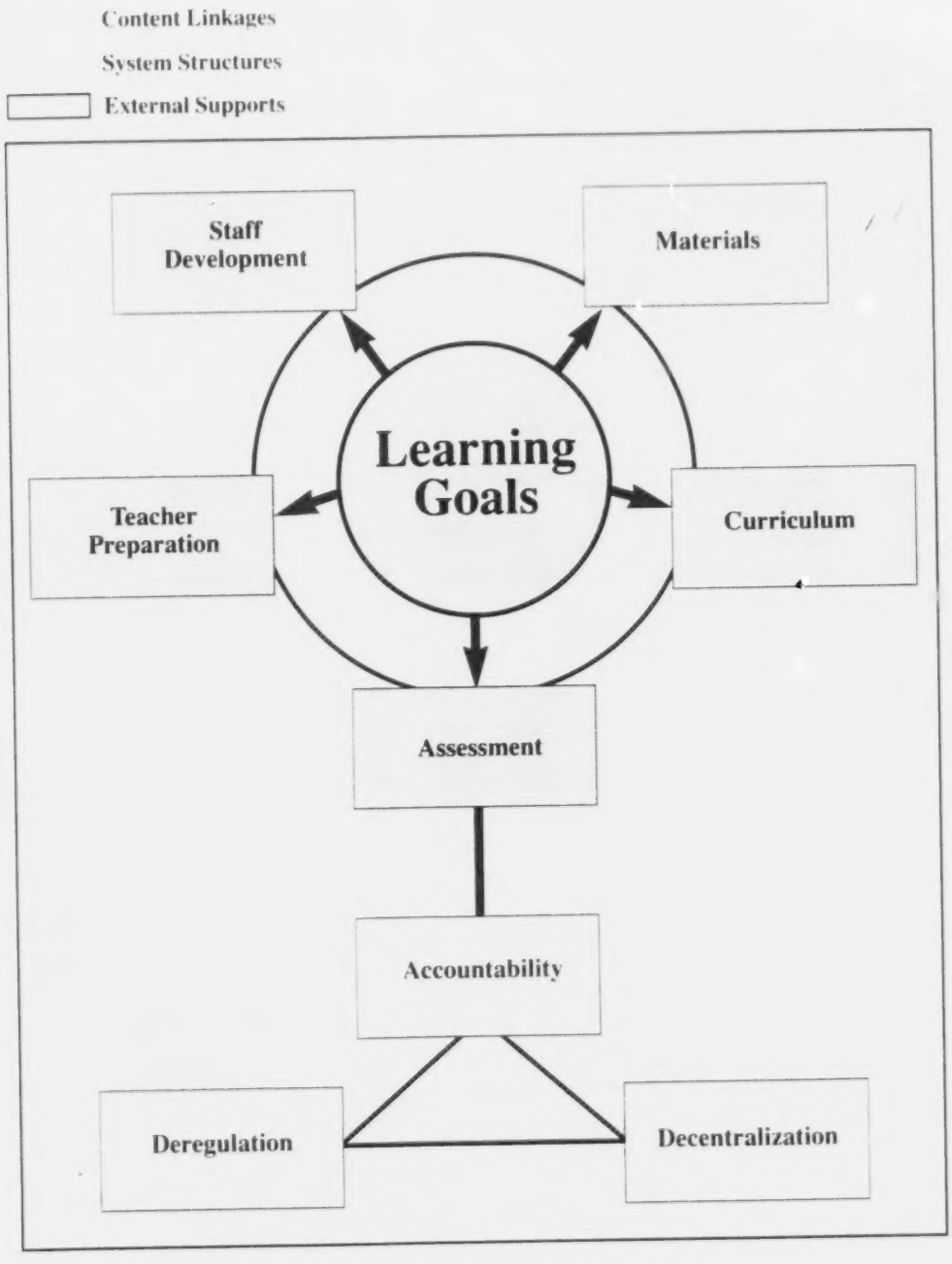
The first set of critical linkages (see Figure 1) connects the national goals, linking the early years to the school years to lifelong learning. These linkages are discussed in *Educating America: State Strategies for Achieving the National Education Goals*, the 1990 report of NGA's Task Force on Education. This report, *From Rhetoric to Action: State Progress in Restructuring the Education System*, focuses primarily on restructuring the K-12 system and related changes in higher education.

The second set of linkages (see Figure 1) adds essential external supports—parents and community as well as health and social services—to the preschool years, the school years, and the after-school years. Without these supports, schools cannot succeed in significantly raising the performance of all students. States must not only devise ways to coordinate the delivery of health and social services with education to students, but also ensure that the systems delivering these services are accountable for results.

The third set of critical linkages (see Figure 2) is based on content. Challenging learning goals and standards for performance drive the content and must be reflected in the curriculum for all students, the materials they use, the assessment instruments, and the preparation and retraining of teachers and administrators to fulfill their new responsibilities.

The fourth set of linkages (see Figure 2) connects the structural features of the system to each other and to the content linkages through assessment.

Figure 2: The Critical Linkages for the School Years



Accountability must rest on assessments that measure valued outcomes. Changes in how authority is distributed, which decisions are decentralized to what level, how accountability systems operate, how flexibility is provided, and how incentives are built into the system must all be designed to reinforce each other and the desired performance goals for students.

Creating all of these linkages is a major challenge. Kentucky represents a comprehensive legislative approach, with linkages across many parts of the system. However, few states have the "blank slate" opportunity provided by Kentucky's supreme court ruling that found the whole system unconstitutional. Creating a system from scratch allowed simultaneous consideration of content (including goals, curriculum, performance assessment, and professional preparation and development); governance (including school-based decisionmaking, accountability with rewards and sanctions, and flexibility), and external supports (including preschool and support services for disadvantaged students). (See *Highlights of Kentucky Legislation*.)

Vermont also has content and governance linkages, though with its strong tradition of local autonomy, they are quite different from those in Kentucky. Vermont's restructuring is driven by a set of goals created through a public participatory process that allowed substantial time for review by students, parents, educators, the state board, and the legislature. The next step was an analysis of existing policies and programs in light of their contribution to the creation of a performance-based system in which all the parts are linked. One result is the development of a new assessment system; Vermont is now pilot testing a new portfolio assessment system that provides accountability while stimulating professional growth and curriculum development. At the same time, all the teacher training institutions committed to redesign by the fall of 1992 programs and approval mechanisms to be more results-based. As the basis for restructuring, the state department of education is undergoing an internal self-examination in order to become the same kind of high-performance organization it is seeking from schools.

On the governance side, Vermont has repealed its basic skills requirements for all students and shifted its foundation formula to one that redistributes money to poorer rural areas. The state's accountability system is tied to its "school approval process," which is required for a school to receive state aid; approval is based on quantitative and qualitative data on curricula, services (e.g., counselors, library), and student outcomes. (See Figure 3 on page 8.)

California's strategy is to concentrate on content with state curriculum frameworks as the keystone. Curriculum frameworks have been developed for seven subject areas by committees of top-notch educators from districts and universities across the state, augmented by national experts. The frameworks emphasize understanding and thinking and are revised every seven years to keep current in each field. State textbook selection is based on the frameworks and has influenced textbook publishers to revise textbooks to make them more challenging and intellectually stimulating. The California Assessment Program is being redesigned to measure the content of the frameworks, including performance items. Staff development for teachers and administrators provided by the state is designed to support the frameworks. (See *California Science Framework* on page 18.)

The new Arizona Student Assessment Program includes the establishment of challenging curriculum standards and corresponding performance assessments developed in conjunction with a commercial publishing company.

Legislation in North Carolina and proposed legislation in Washington illustrate governance linkages. North Carolina's Senate Bill 2 puts in place an outcome-based accountability system. The state provides guidance through assessment, accountability, and broad budget guidelines replacing very specific

Highlights of Kentucky Legislation

Kentucky's Education Reform Act states six broad student performance goals as the basis for creating a coherent system of instruction and assessment. The Governor created the Council of School Performance Standards, which is charged with framing the goals in measurable terms by December 1991.

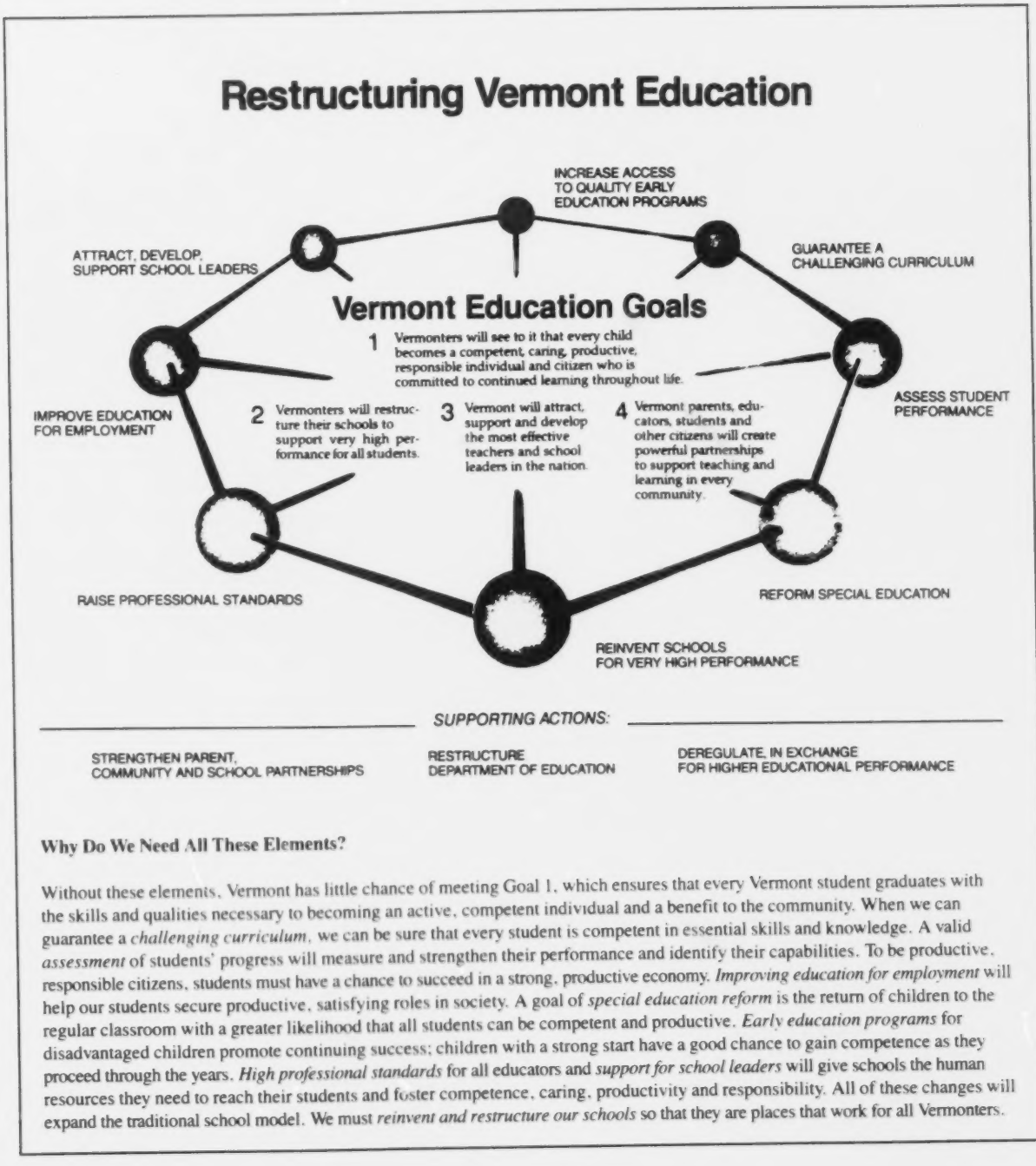
By July 1993, the state will create a curriculum framework based on learning outcomes adopted by the State Board of Education. The framework will identify teaching and assessment strategies, instructional materials, ideas on how to incorporate the resources of the community, a directory of model teaching sites, and alternative ways of using school time. The legislation also includes:

- the establishment of developmentally appropriate half-day preschool for all four-year-olds;
- an ungraded primary program to grade four in all elementary schools;
- additional noninstructional time for teachers for professional development, instructional planning, school council work, curriculum development, and community outreach;
- a long-range technology plan including a statewide fiber optic system;
- support services for disadvantaged students, through a network of family resource centers at or near elementary schools, and youth service centers for adolescents;
- development of performance assessment instruments based on the measurable outcomes created by the council;
- school-based decisionmaking by school councils of principals, teachers, and parents with responsibility for employing and assigning all staff; designing curriculum; student assignments; schedule and use of space; and instructional, discipline, and management practices;
- forgiveness of tuition loans for teachers and an alternative certification program;
- professional development programs for all certified personnel; and
- additional money and equalization of resources.

expenditure categories. Washington's proposed legislation removes all state requirements for specific courses and amount of instruction and establishes a performance-based system.

To link support systems, states and districts are beginning to experiment with different ways to provide students access to a coordinated set of health and social services. Florida's Department of Education is working with Health and Rehabilitative Services to develop a strategic plan for creating "full service" schools, expanding on existing grants and training. California's Governor has added a cabinet-level secretary for child development and education. The Annie E. Casey Foundation's New Futures Program provides $10 million to each of five cities to address the problems of at-risk thirteen- to nineteen-year-olds through coordinated comprehensive services and in-school support teams, headed by case managers. A number of states have implemented intervention strategies for young children and their families, for parent education, and for adult literacy. (See *State Actions to Coordinate Services* on page 9.)

Figure 3: Vermont Restructuring Components


Restructuring Vermont Education
INCREASE ACCESS TO QUALITY EARLY EDUCATION PROGRAMS
ATTRACT, DEVELOP, SUPPORT SCHOOL LEADERS
GUARANTEE A CHALLENGING CURRICULUM
Vermont Education Goals
1 Vermonters will see to it that every child becomes a competent, caring, productive, responsible individual and citizen who is committed to continued learning throughout life.
IMPROVE EDUCATION FOR EMPLOYMENT
2 Vermonters will restructure their schools to support very high performance for all students.
3 Vermont will attract, support and develop the most effective teachers and school leaders in the nation.
4 Vermont parents, educators, students and other citizens will create powerful partnerships to support teaching and learning in every community.
ASSESS STUDENT PERFORMANCE
RAISE PROFESSIONAL STANDARDS
REFORM SPECIAL EDUCATION
REINVENT SCHOOLS FOR VERY HIGH PERFORMANCE
SUPPORTING ACTIONS:
STRENGTHEN PARENT, COMMUNITY AND SCHOOL PARTNERSHIPS
RESTRUCTURE DEPARTMENT OF EDUCATION
DEREGULATE, IN EXCHANGE FOR HIGHER EDUCATIONAL PERFORMANCE

Why Do We Need All These Elements?

Without these elements, Vermont has little chance of meeting Goal 1, which ensures that every Vermont student graduates with the skills and qualities necessary to becoming an active, competent individual and a benefit to the community. When we can guarantee a *challenging curriculum*, we can be sure that every student is competent in essential skills and knowledge. A valid *assessment* of students' progress will measure and strengthen their performance and identify their capabilities. To be productive, responsible citizens, students must have a chance to succeed in a strong, productive economy. *Improving education for employment* will help our students secure productive, satisfying roles in society. A goal of *special education reform* is the return of children to the regular classroom with a greater likelihood that all students can be competent and productive. *Early education programs* for disadvantaged children promote continuing success; children with a strong start have a good chance to gain competence as they proceed through the years. *High professional standards* for all educators and *support for school leaders* will give schools the human resources they need to reach their students and foster competence, caring, productivity and responsibility. All of these changes will expand the traditional school model. We must *reinvent and restructure our schools* so that they are places that work for all Vermonters.

State Actions to Coordinate Services

In Arkansas, Department of Education staff are using the national goals as a structure for analyzing activities in every state agency. For each goal, a chart displays all state-level activities for every objective as a starting point for coordinating services and establishing collaborations across agencies. The charts also point out where there are no current state actions targeted to a specific objective as a basis for future planning.

Colorado has a new cabinet to coordinate services to families. Comprehensive services centers focusing on prevention will be set up in schools. Lump sum funding will be handled at the state level. The council will award money for services by program. All services require a family impact statement, and providers are accountable for results.

Maryland's thirteen Family Support Centers offer community-based support services to low-income families around the state. Programs are designed to address problems related to education, family stability, health, and poverty. The Governor's Office for Children, Youth, and Families coordinates programs in the Departments of Education, Health and Mental Hygiene, Human Resources, and Juvenile Services.

In Missouri the Governor has charged a Cabinet Council on Restructuring Services for Missouri's Children to create a single state agency that will facilitate community solutions for children and their families. This new design will focus on a simpler structure, local decisionmaking, and public accountability to drive changes in the human services marketplace.

The Ohio Board of Regents has developed a program to create partnerships among communities, community colleges, schools, and universities to offer early intervention for at-risk high school students and to improve the college attendance rates of minority students.

South Dakota is encouraging interagency collaboration to serve children and families. Several human service agencies collaboratively link their services within eight regions of the state to provide a community center of services.

What's Happening: Progress and Challenges

Across the country, from individual schools to district offices to state departments of education, there is increasing evidence of the beginnings of restructuring. Conferences, meetings, and publications on restructuring abound. A brief overview of the approach each state has taken to improve its education system can be found in Appendix C.

States are breaking new ground as they take on the challenge of systemic restructuring. They are beginning to recognize the enormous complexity of planning and managing the transformation of a multilevel bureaucracy. Some states are finding it easier to create small-scale experiments than to tackle the whole system, to change one or two pieces rather than many.

The task is further hampered by serious state budget constraints. With more than half facing budget deficits, states must make hard choices among pressing priorities. Retraining educators for new roles requires a substantial investment of resources, as do prenatal care and basic support services for the rapidly increasing number of poor children.

Budget deficits can provide an opportunity to restructure and reallocate resources in different ways, but simply cutting existing budget categories without rethinking how the system is organized misses the opportunity and can further weaken the system. The budget process must be linked with the goals of restructuring and their implications for changes at all levels of the system. Declining resources demand creative rethinking about how resources are allocated and inventive ways to increase the leverage of existing resources.

Budget shortfalls provide an opportunity to rethink the way the education system operates.

Each state starts at a different place. Whether the starting point is creating a curriculum framework tied to new goals, establishing a pilot for school-level restructuring, or developing new assessment instruments, many of the same challenges are appearing in every state. Some have moved further than others on some issues. Their experiences can provide useful guidance around the most common challenges:

- mobilizing public opinion in support of restructuring for much higher performance;
- linking curriculum, assessment, teacher preparation, and ongoing learning for current staff to challenging goals for student achievement;
- stimulating innovation and sound experimentation so that educators, the public, and policymakers have examples of new structures at all levels of the system;
- building organizational structures that encourage and support continuous progress toward challenging goals, including new systems of incentives and accountability, deregulation, and decentralization; and
- creating the supporting management infrastructures at all levels that facilitate continuous improvement.

Mobilizing Public Opinion

Restructuring education cannot occur without the active involvement and support of all the stakeholders: the education community, the business community, parents, the public, and political leaders. The number of state leaders conversant about restructuring is increasing, yet support from the general public and the education community lags behind.

People are unlikely to support restructuring unless they both perceive the seriousness of the problem and are able to imagine a more effective system. States have made progress through a combination

of clear and consistent communication strategies about the problem and the solution, participatory mechanisms for setting performance goals, and perseverance.

Selling the Problem

"Education is in trouble but my school is fine."

Citizens who acknowledge serious problems with "our nation's schools" rarely see their own state, district, or school in need of improvement. When problems seem remote, it is hard to mobilize support for fundamental changes. Preaching the severity of the problem may convince some members of the public, but it is clearly at the expense of educators, who already are at best demoralized and at worst blamed for the system's failure. After all, teachers have been doing what the system has asked of them; now the system has different expectations. State leaders are faced with a double-edged sword—trying to convince the public that there is a crisis in education while supporting educators, parents, and students.

This barrier is greatest in communities and states that have previously considered themselves highly successful. It is indeed a challenge to convince the public that schools are failing students at the top of the scale as well as those at the bottom.

The National Education Goals Panel and others will contribute substantially through efforts to set high standards and measure progress. Without some idea of what students should be expected to know and be able to do, neither those inside or outside the education system can draw reasonable conclusions about the current state of the system, their school, their students, or their children. International comparisons are striking. (See Figure 4 on page 12.) Even our best students do not fare well compared to their peers in other nations. Worse yet, both students and their parents are more satisfied with their performance than their counterparts in other countries.

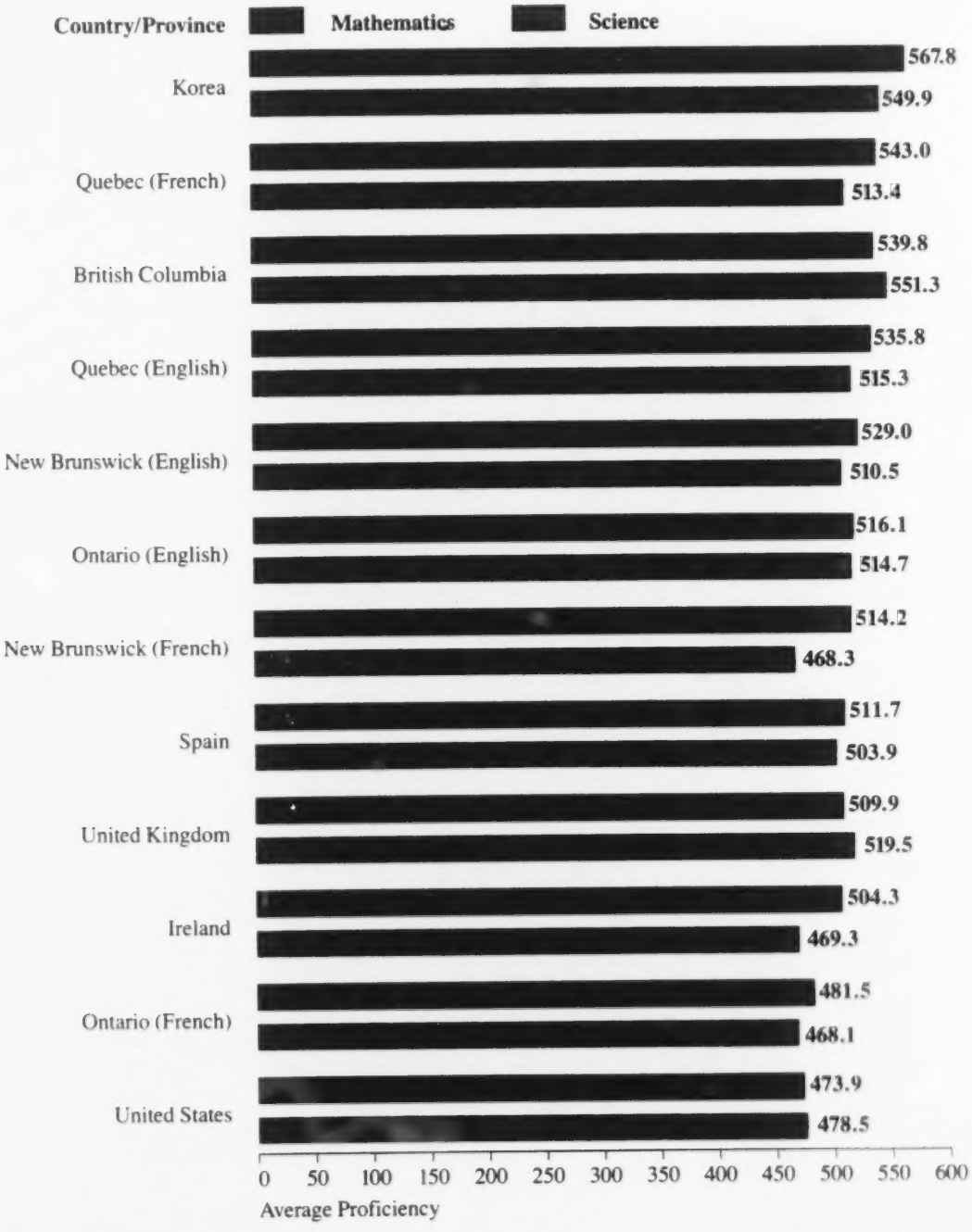
State leaders are finding ways to cast the problem to engender broad support. All constituencies can rally behind the idea that the world has changed, our society has changed, and higher standards are needed to maintain the standard of living and to compete successfully in a global economy. By yesterday's standards, schools are successful, at least for many. But the standards of today and tomorrow demand a different kind of teaching and learning that in turn requires structural change throughout the system.

In New Hampshire, academic outcomes are presented not as minimum standards, but as benchmark expectations of what a high school graduate should know and be able to do. Vermont leaders are "reinventing the schools for high performance." In Iowa, which lays claim to the highest SAT scores in the nation, state leaders are calling for a "world-class system." Prominent business leaders and organizations like The Business Roundtable, the National Alliance of Business, and the Committee on Economic Development are helping to spread the word. As Kodak's President and CEO Kay Whitmore has put it, "We can raise our standard of performance or lower our standard of living."

State and local leaders are taking lessons on public relations and the use of media from the private sector. For example, the Business-Higher Education Forum and the Public Agenda Foundation have initiated a multi-year project to help the public see the links between inadequate education, declining economic competitiveness, and a lower standard of living. Materials include a newspaper supplement, a TV documentary, public service announcements, newspaper advertisements, and op-ed articles. Without a concerted effort to educate the public and to communicate the message over and over, the media—and hence, the public—often draw erroneous conclusions.

States with the greatest success in building public support have used a combination of print media, radio, television, and, most of all, face-to-face com-

Figure 4: Mathematics and Science Proficiency at age 13, by Country/Province: 1988



Source: U.S. Department of Education, National Center for Education Statistics, International Assessment of Educational Progress. A World of Differences, by Educational Testing Service.

munication. The strategies differ from state to state and are tied to the political culture and bank account of each. Selling restructuring requires the same approach as adapting a political campaign to the culture. While a series of town meetings might be appropriate in the New England states, a massive media campaign might be more appropriate in California.

To support restructuring, people need concrete images of successful practices and clearly defined high standards against which to gauge where their schools are.

In Vermont, the state commissioner of education spreads his message through a clear and consistent communication strategy. He attends town meetings, meets with all the superintendents, and reiterates the messages often. To stimulate public support, forty Vermont schools are piloting School Report Card Day, a day when schools report and discuss results with members of their communities.

Arkansas and Florida communicate through statewide and regional conferences that bring together school staff involved in restructuring their organizations with representatives from the legislature, businesses, higher education, and the public. These forums provide opportunities to raise awareness and generate enthusiasm and support by providing concrete examples of restructuring.

The education commissioner in Massachusetts has spread the word to educators by using common language across a variety of different programs, reinforcing the message of schoolwide improvement and challenging curricula for all students. Programs ranging from special education to dropout prevention reflect the same philosophy and language, as does the department's series of reports on structuring schools for student success.

Some states require tactics that can incorporate previous reforms, especially where large investments accompanied by large promises have been made in the recent past. States in this situation present restructuring either as building on earlier reforms or as changing the course because the previous approach did not work.

Goal Setting Process

A broad-based participatory process for creating state goals is an effective means for communicating and building public support. The national goals provided a starting point for many states. Some adopted the national goals and elaborated or adapted them to their circumstances; others used the national goals as a starting point for generating public discussion. Michigan was the first state to adopt the national goals as its own goals, while states such as Alabama and West Virginia modeled theirs after the six national ones. Nebraska established six task forces for implementing the national education goals. Nevada developed a ten-year education plan to move the state toward achieving the national education goals. In Colorado the Governor appointed the Colorado 2000 Communities Initiative Steering Committee. The committee is charged with developing a campaign to advocate the national goals and assisting local communities to organize themselves to meet the goals. Citizens at more than 140 local sites participated in a statewide teleconference "town meeting" to launch the campaign.

Across the country, Governors are citing the value of the national goals in their crusades to "wake up the political and business community," "to move in preschool and higher education as well as elementary and secondary," and "to spur the move to outcome goals." With the help of the business community, state leaders are using goal setting to educate the public about the need to raise standards and the importance of moving away from lists of facts and minimum competencies to conceptual understanding, critical thinking, communication, and learning how to learn. (See *Maine's Common Core of Learning* on page 14.)

Although the process varies by state, a number of states have linked goal setting with recommendations for restructuring the system, typically through a commission, task force, or planning group. In Wisconsin, the Governor and the state superintendent of public instruction established a broadly representative seventy-six-member commission in December 1989. After more than 175 meetings, including public forums and hearings, the commission issued a report in December 1990 with far-reaching rec-

Maine's Common Core of Learning

Maine's Common Core of Learning was created by a commission of forty-five members from across the state. It is based on recent research and input from students, employers, subject area specialists, and others. The Common Core of Learning is organized by four essential concepts—personal and global stewardship, communication, reasoning and problemsolving, the human record—that cross all subject areas. The goals for each concept are presented in their general form—for example, "Find tools in all areas of study to solve problems, investigate content, and develop thinking skills." For each of eight subject areas, goals are described in three categories: knowledge, skills, and attitudes. In addition, subject-specific goals have been established for each of the four concepts. "We want our students . . . to acquire the fundamental and specific aspects of each subject area and be able to integrate this knowledge to see the world as a multifaceted whole."

THE COMMON CORE OF LEARNING

ommendations for system changes based on a new set of goals for education reflected in its title, "A New Design for Education in Wisconsin: Schools Capable of Continuous Improvement."

Kansas developed its goals in the context of creating a strategic plan that sets ten directions for restructuring. The process involved the state board of education, national consultants, superintendents, legislators, and business representatives, among many others. (See *Rationale for Strategic Directions for the Structuring of Kansas Schools* on page 16.)

In North Dakota, the Governor created the Education Action Commission, which developed goals and recommendations on the basis of public hearings. The commission ensured broad support through a two-day consensus-building conference representing business, education, health, and the general public. They presented their recommendations to the editors of all major newspapers in the state and to a joint hearing of the state House and Senate Education Committees. Although that commission has been dissolved, the Governor will create a new commission to follow up on the recommendations.

Maintaining Momentum

Maintaining momentum through changes in leadership is a challenge for those involved in restructuring in virtually every state. Commissions and other groups that derive their legitimacy from their broad representation can help bridge transitions in leadership. Some states have created legislative and business oversight groups that are not aligned to elected officials or political parties, such as the Public School Forum in North Carolina and the Joint Business-Education Subcommittee in South Carolina. South Carolina has also maintained a focus on improvement by earmarking funds from a 1 percent sales tax increase for the Education Improvement Act.

Oklahoma's Task Force 2000 was established by the Governor and the legislature to provide ongoing advice and propose legislation on education issues. Its first report formed the basis for comprehensive legislation, and it continues to serve the legislature and the public.

In several states, business groups play a valuable role in maintaining a focus on restructuring across changes in leadership. Such groups are poised to move quickly when new leadership takes the reins, as in Ohio, where Business Roundtable companies made an immediate alliance with the new Governor to form a Quality Management Council.

Because restructuring is a long-term process, states must create strategies for sustaining commitment beyond policymakers' terms of office.

Every state faces the challenge of finding the right balance between the need to build broad-based support—often through time-consuming participatory mechanisms—and the need to move quickly to action with the flexibility to adapt. Prolonged discussions with no sign of action can unravel support. Each state must make difficult choices about how much time to spend on each facet.

Linking the Content

States are beginning to explore how to make the critical content linkages. Once challenging standards for student performance are in place, the next critical steps entail linking curriculum, materials, assessment, staff development, and teacher preparation. Without these critical linkages in place, classroom practices will not change in ways that will lead to higher student performance. These linkages are particularly powerful at the elementary level before students fall too far behind to benefit from a challenging curriculum.

States vary considerably in their capacity to create these linkages for a variety of reasons. The extent to which a state can or is willing to play a role in

Rationale for Strategic Directions for the Structuring of Kansas Schools

The primary product of education has always been the knowledge, skills, and attitudes that individuals gain from their education activities. Far too often our concerns have focused on those individuals who came to schools with significant advantages that families can provide. It has been as if we were focused on "picking" winners rather than "developing" winners.

Our attention has often been drawn to the working of the system rather than the needs of the learners. Educational excellence begins when we focus our attention on individuals and the successes of the teaching-learning process. Structuring must include the difficult process of envisioning what education must be to meet changed community and societal conditions.

Finding new visions of education and meanings of education is not easy. It requires that we understand the process of change and that we design and structure education in light of both phenomena. Examples of both the value shifts and these changes are provided at right.

Kansas, in order to remain an economic leader in the United States, will ensure that education is the most important business in the state. Changing some of our most basic assumptions about the nature of teaching and learning is difficult but the essential first step for restructuring. Some may ask why do we need to restructure when the current system works well for some, but not all of our students. The answer must be we have to develop human capital at higher levels of quality, and we must ensure that all groups of learners are provided with the knowledge and skills needed for an information society.

Value Shifts and Their Directions for Education

From	To
School	Learning and human resource development
Accreditation or "seat time"	Performance and competency achievement
Schooling as preparation for adult roles	Schooling as preparation for lifelong learning
Limited achievement	No limits to learning
Sorting	Open opportunity systems
Measures of factual recall	Assessment of thinking and information-processing skills
Teacher as content deliverer	Teacher as manager of learning
Teacher-centered learning	Learner-centered learning
Teacher responsible for structuring knowledge	Teacher responsible for teaching students to structure knowledge (information processing)

From *Strategic Directions for Change for Kansas Schools and Communities*, Kansas State Department of Education, 1989.

developing curriculum or selecting textbooks and other instructional materials varies by state constitution and tradition. Those who make decisions about curriculum are not the same as those who make decisions about teacher preparation requirements or certification. Resources are needed for the development of new assessment instruments, though many states are working together and through other organizations. Even greater resources are needed for providing content and pedagogical knowledge to the current teaching force.

States are starting at different places—some with curriculum, some with assessment—but are quickly finding out how intertwined the pieces are. Assessment instruments can push curriculum and instruction in the right direction, but such instruments depend on challenging curriculum goals for students. Most states begin with several linkages in place, but they are linked around low-level goals for students.

An outcome-based system cannot lead to higher performance unless the goals go beyond minimum competencies.

Only a few states have linked several pieces around challenging learning goals for students. A much larger number of states are making progress in at least one of the content areas—curriculum frameworks, assessment, materials, staff preparation, and development.

Curriculum and Materials

A number of states are setting broad, conceptual learning goals for students in the form of curriculum frameworks. Even states like Colorado that are constitutionally prohibited from setting curriculum are developing frameworks to serve as models for districts. The word "frameworks" means something quite different than the typical long lists of goals and objectives for every subject area and every grade level. Frameworks set out the broad concepts in a field. They do not specify exactly what should be taught, or when or how it should be taught, but instead describe the important themes and concepts students should master before graduation.

California has developed curriculum frameworks for a number of years through a committee process involving teachers, curriculum specialists, university faculty, and national experts. The frameworks are revised every seven years to ensure that the latest knowledge about the subject area and about how it is best taught and learned is incorporated. (See *California Science Framework* on page 18.) Connecticut also develops curriculum guides that are revised to reflect the latest research.

California has linked its curricular frameworks to textbook selection, exercising significant influence over the materials produced by textbook publishers. Decisions in other states will similarly affect the previously narrow range of choices available to most educators. For example, the recent decision by Texas to include videodiscs as acceptable textbooks may have a similar influence. Florida also is investing in interactive videodiscs and providing a videodisc player to every school. In New Mexico, schools can request waivers to use textbook funds to purchase a variety of alternative materials.

Assessment

States are universally finding that assessment is critical. Whether it is the primary driver or the result of establishing curriculum frameworks or standards varies from state to state. But in either case, states are finding that it is hard to change the system without having tests in place to measure the new standards. Although states recognize that assessment alone will not bring about improvement, it is nevertheless essential for measuring student progress and is the linchpin of a strong accountability system.

California Science Framework

The 1990 Science Framework is cited nationally as an exemplary, state-of-the-art curriculum framework. It is a soft-covered book of 220 pages that presents the content of all K-12 science curriculum and provides guidance on implementing the curriculum. The contents include:

Part I. What is Science?
The Nature of Science
The Major Themes of Science
Part II. The Content of Science
Physical Sciences
Earth Sciences
Life Sciences
Part III. Achieving the Desired Science Curriculum
Science Processes and the Teaching of Science
Implementing a Strong Science Program
Instructional Materials Criteria

The framework embodies the philosophy that modern science should be taught free of dogma in ways that emphasize connections and actively engage students. Hence, the content is organized around six major themes or big ideas that cut across the physical sciences, earth sciences, and life sciences. The themes are energy, evolution, patterns of change, scale and structure, stability, and systems and interactions. Teachers are not required to use those exact themes as long as they use the major ideas of science to communicate explicitly the interconnections of facts.

The description of content is intended for educators and textbook publishers and aims to avoid the widespread emphasis on isolated facts and definitions in science teaching. It presents the underlying theories within the traditional areas of physical sciences, earth sciences, and life sciences followed by sets of conceptual questions central to the content. The content is then described narratively from the perspective of one or more of the unifying themes appropriate to various grade levels.

For example, Reactions and Interactions, one of eight subdivisions of physical sciences, is guided by two questions: What happens when substances change? What controls how substances change? In K-3, students observe interactions (e.g., vinegar and milk) and the effects of conditions (e.g., heat on ice melting or baking cookies). In grades three to six, students make inferences from careful observation and learn about the underlying molecular structure, how compounds are formed, and the concept of the use of models. In grades six to nine, students learn to use symbols and equations to describe changes and the basic principles of chemical reactions. In grades nine to twelve, students learn about nuclear processes and the role of catalysts.

There is considerable activity in new test development at the state and national level by consortia of states and traditional test publishers. Recognizing the need to move forward on new assessments as quickly as possible, states are joining groups such as the New Standards Project, a joint effort of the National Center on Education and the Economy and the Learning and Research Development Center, or the State Alternative Assessment Exchange, sponsored by the Council of Chief State School Officers and the Center for Research on Evaluation, Standards and Student Testing. Collaboration offers states an opportunity to share what is being learned and to reduce research and development costs. The goals are the same: creating instruments that go beyond paper-and-pencil multiple-choice tests pegged to national norms to those that capture understanding and measure performance against high standards.

Arizona, California, Connecticut, Kentucky, Maryland, Vermont, and other states are involved in creating new forms of assessment that expressly aim to measure applied and conceptual skills. A

growing number of states have writing assessments. Vermont is experimenting with portfolio assessment in writing and mathematics. Connecticut is creating performance-based assessments in science and mathematics. In both states, involving teachers in creating, administering, and scoring the assessments is a vehicle for professional growth.

But it is the exception, not the rule, that state assessments are derived from challenging standards for student outcomes and linked to curriculum. (See *Performance Assessment in Maryland* on page 20.)

Assessment must be based on challenging curriculum standards to pressure the system to improve.

Even states that have an explicit strategy to drive reform through assessment must cope with the time it takes to develop appropriate instruments and unresolved issues of sampling and secrecy. The logic of using a challenging assessment tool to motivate students and teachers to improve presumes that students, educators, and parents know what will be tested and have access to results on individual students. State assessments based on a sample may not accomplish this goal. The New York Regents Examinations, which tie assessment to curriculum, come the closest, but only 45 percent of high school students pass enough exams to receive a Regents Diploma.

Moreover, for assessment to drive improvement, teachers need training to administer and score the new assessments. States like California and Connecticut have found this to be a powerful form of professional development but do not have the resources to carry out the training on a large scale.

So what are states doing in the meantime? Kentucky has adopted an interim strategy commissioning the development of a NAEP-like test that will be an improvement over current standardized tests but will be available much more quickly than more authentic performance-based measures. Yet Kentucky, among other states, faces two problems. One is that the interim measure could well become more permanent than is envisioned; the other is that districts will continue to use standardized achievement tests that can undercut the positive impact of better measures. The latter works in reverse as well—some districts are developing performance-based assessments but their impact is weakened by state-required standardized or minimum competency tests. Adding new assessments without removing older, narrower ones will slow progress.

Staff Development

As states continue to pursue their restructuring agendas, they face the need to retrain the education workforce—teachers and administrators—with limited resources. This challenge requires a total rethinking of how to deliver such massive retraining, which in turn requires rethinking how schools are organized and staffed. For this is not simply a matter of retraining once and for all. It is a far greater challenge: building into the jobs of educators the time, opportunities, and incentives to continue to learn throughout their careers.

The kinds of curriculum and instruction that lead to desired student outcomes are far more demanding on teachers, and their administrative support, than "teacher talk" and "worksheets." Few teachers are prepared for this kind of instruction, either in content or pedagogy. Few districts or states offer staff development in ways that meet these needs. Effective staff development requires a combination of strategies, including intensive institutes, access to research and the experiences of others, and on-site expertise—from colleagues and from outside consultants. Individual schools and districts are beginning to figure out cost-effective ways to do this. States are beginning to experiment with some new approaches—such as professional development schools. Hawaii delivers staff development to all

its schools via interactive (one-way video and two-way sound) television from the state office. But in general, this critical underpinning of improvement is sorely lacking in practice.

Solutions involve a combination of new roles for teachers, new school organization and schedules, innovative uses of technology, and new roles for district and state providers of staff development. New administrator roles similarly require a new kind of professional development—training as internal consultants, team members, technical advisers, negotiators, mediators and managers of change.

There are few models of administrator training, especially for central office staff. Districts and states are experimenting with support teams and, with the help of business, are taking advantage of corporate training opportunities. In Colorado a staff person in the Governor's office matches educators to available business training programs. Business Roundtable companies are supporting summer institutes for superintendents from at-risk districts in New Jersey. (See *Innovative Staff Development Practices* on page 22.)

There is also a growing trend toward training teams of administrators and teachers from schools. For example, Iowa's LEAD program provides school-based teams with skills in managing change. Many states are also establishing centers or academies for ongoing professional development. Professional development schools are another approach that combines teacher preparation and staff development with

Performance Assessment in Maryland

In one prototype of Maryland's approach to performance assessment, eighth-grade students are asked to imagine themselves as developers proposing to build a restaurant. Beginning with a pre-assessment activity, the teacher ensures that students know the vocabulary used in the assessment (developer, market research, questionnaire, zoning board) and they begin to see the relationship between classroom mathematics and the real world.

The first activity has the students develop a questionnaire and survey plan to determine what kind of restaurant people want. They create questions in groups and then design the questionnaire and survey as a class. Armed with questionnaires on clipboards, students become market researchers and spend the next couple days collecting data from twenty-five people they know. Students display their data in individually designed charts and graphs.

Students then return to the role of developer. Using geometry and the results of their surveys, they consider the size and shape of available lots. They have to work within realistic constraints on building size, parking space, and landscaping. Students do a draft scale drawing and then a final design. They then calculate the specific costs of building the restaurant, including the parking lot and equipment. They must also defend their cost estimates.

The final activity consists of writing a paragraph explaining their decisions as though it were being presented to the zoning board.

There are guidelines for scoring each of the five aspects of mathematics assessed in this activity—communication, reasoning, problemsolving, connections, and technology—and a rubric scoring the students' ability to understand the concepts involved and accurately apply the appropriate algorithms.

Note: This example is based on a description of a prototype of Maryland's School Performance Assessment Program provided by Ruth Mitchell of the Council for Basic Education. There are corresponding tasks for fifth and eleventh grades.

research and development. These are elementary and secondary schools in which school faculty, university faculty, and student teachers or interns learn together. Michigan is experimenting with a number of such schools.

These approaches signal an important move away from the traditional narrow, ineffective workshop approach to staff development. In fact, some of the most effective staff development efforts underway are not even called staff development. For example, state pilot programs and grants that support extra time and new roles for teachers, such as Schools for the 21st Century in Washington, demonstrate models of ongoing learning for school staff. The process of planning school restructuring places some teachers in the role of gathering information, which they then share with others. Some attend workshops and then train their peers; others already have expertise that they share with their colleagues when time is provided for this activity. Schools organized into mini-schools with teams of teachers facilitate this kind of peer training.

Similarly, teacher involvement in state-of-the-art developmental efforts creates new sources of expertise inside schools. States that involve teachers in developing curriculum frameworks, project approaches to curriculum, and new assessment instruments are creating a pool of new talent that can be shared with colleagues. States such as California and Connecticut are also re-educating teachers through training associated with the administration and the scoring of new performance assessment. Florida offers sabbatical programs for teachers to develop curriculum and participate in other renewal experiences.

Professional development for teachers and administrators must be totally transformed from the narrow conception of workshops and courses to a range of opportunities built into the job for continuous learning and improvement.

Teacher and Administrator Preparation

Incoming educators must be prepared differently than in the past to be able to take on the new roles demanded by a high-performance system. In addition to professional practice schools and specific support mechanisms for new teachers, colleges and universities must significantly restructure their teacher and administrator preparation programs from highly regulated courses of study to outcome-based systems. Like elementary and secondary education, higher education must shift from procedural requirements for coverage (methods courses in every subject) to performance outcomes, and from lectures to project- and team-based approaches. Similarly, the programs must have higher standards with a more rigorous curriculum and far more opportunities for guided practice in actual school settings.

A number of states and individual institutions of higher education have begun to change their teacher preparation programs to a limited extent. Several have moved from four- to five-year teacher preparation programs that result in a master's degree. Some institutions plan to create learning communities in which a group of prospective teachers and faculty work together throughout the program's duration on campus and in partnership with a school. The Holmes Group, a consortium of research universities, and Project 30, a collaborative effort of thirty institutions, are promoting a closer relationship between teacher education and arts and sciences faculties to strengthen teacher preparation. The Education Commission of the States and the American Association of Colleges of Teacher Education have joined forces to link the renewal of teacher education with existing efforts to restructure schools; the result is a pilot of partnerships among institutions of higher education, state governments, and individual schools to be tested in six sites.

Under a grant from Carnegie Corporation of New York, Massachusetts is developing a site-based teacher preparation program in six rural and urban

Innovative Staff Development Practices

Maine has expanded its LEAD (Leadership in Educational Administration Development) Consortium to become a broad-based group representing all educational associations, including administrators, teachers, school boards, the special and vocational educators, as well as the state department of education, the university system, and the business community. The consortium sponsors a variety of activities to strengthen school leadership, including encouraging women to become leaders, developing training models for principals and superintendents on restructuring, and sponsoring workshops and seminars. It currently is planning a week-long summer seminar on redesigning schools for teams of teachers, administrators, and community members from participating schools.

Massachusetts' Department of Education and Association of School Administrators have a foundation grant to implement a four-year project to enhance superintendents' leadership in promoting school-based management and restructuring. The development includes a series of colloquia, collegial support networks, peer coaching teams linked to higher education, and two pilots that will serve as laboratories for creating and disseminating effective school-based management practices.

South Carolina's Center for the Advancement of Teaching and School Leadership at Winthrop College was created to assist schools in the process of restructuring. It is a collaboration of twenty institutions of higher education, public schools, the state policymaking community, and the private sector. Through the center's Associate Schools Program, participating schools form teams of teachers, administrators, parents, higher education staff, and the business community to oversee their restructuring activities. The center provides training, opportunities to observe innovative practices, and guidance in site-based decisionmaking. The knowledge center staff gain from working directly with school faculties will in turn influence restructuring teacher education programs in the state.

West Virginia's new Center for Professional Development will provide training for superintendents, principals, and teachers. The center is overseen by an advisory group of teachers, college faculty, and representatives of the public. In addition, each district has a teacher-elected staff development council to determine local staff development needs.

middle schools and supporting institutions of higher education to collaborate with middle schools in developing new school-based preparation programs.

The University of Wyoming is starting an ambitious new teacher preparation program that combines content preparation and clinical practice from the onset. Students work with a team of professors and partner schools that will be linked to the university by a two-way interactive video system. Maine and Tennessee are participating in the National Education Association's Teacher Education Initiative, which sets up clinical partnerships between schools and institutions of higher education. Kentucky participates in the same initiative as part of a collaborative effort focusing on alternative licensure.

Perhaps the strongest incentive for strengthening teacher and administrator preparation is a set of corresponding changes in certification or licensing. Even states that have developed new performance goals and curriculum frameworks have not yet incorporated these new requirements for practice into licensing and certification. When the National Board of Professional Teaching Standards offers experienced teachers the opportunity to be board certified in 1993, it can serve as a catalyst to better teacher preparation.

To date, most of the changes states have made in teacher certification are the creation of alternate routes for certification and consortia formed with neighboring states with regional standards for licens-

ing, such as those of the New England Common Market for entering teachers and administrators. New Jersey reports that 40 percent of its new teacher hires are through alternative routes; preliminary research suggests that these teachers are more competent and stay longer than those from the traditional route.

States can transform teacher and administrator preparation by redesigning licensing and certification.

New legislation in Arkansas establishes a task force to design and implement a system of outcome-based licensure for teachers and administrators. The group will define standards for what teachers and administrators must know and be able to do, including performance demonstrations.

Connecticut has developed new performance assessments for licensing incoming elementary teachers. Only 60 percent passed the test on its first administration, supporting Connecticut's claim that it has professionally defensible minimums. Higher education officials took note of the fact that candidates with student teaching experience passed at much higher rates than did candidates without teaching experience—with 65 percent compared with 47 percent.

Stimulating Local Innovation

Recognizing the need to provide resources and conditions that foster thoughtful experimentation and innovation, states have created various kinds of pilot programs and competitive grants and have implemented policies that encourage improvement, including the provision of assistance, training, time, and flexibility. (See also *Accountability: Reporting, Incentives, and Consequences* on page 29.)

Pilot Programs and Targeted Strategies

Pilot programs are an appealing mechanism for stimulating improvement, especially when resources are limited. Across the country—from Arkansas' Restructuring for Higher Order Learning pilot, to Indiana's Schools for the 21st Century, to Utah's site-based management grants—states are launching and continuing pilot programs for many different purposes. Most are competitive grants awarded to individual schools. Beyond its benefits for the participants, a pilot's immediate value depends on the clarity of its purpose and whether the state has a strategy for learning from the experience and making decisions accordingly. Pilots provide concrete examples and a context for discussion. The amount of influence they have on the larger system depends upon whether the necessary systemic changes have been made. (See *Creating Systemwide Conditions for Innovation* on page 28.)

The long-term value of a pilot program depends on whether the system has changed in ways that support successful innovation in all schools.

Most restructuring pilot programs are designed to stimulate innovation inside schools and, less often, districts. These programs are often used to develop cutting-edge exemplars for possible statewide replication, or to demonstrate specific lessons that might be incorporated in legislation, policy, or other reform actions. A smaller number of pilots are created to test specific ideas or strategies, such as the feasibility of portfolio assessment in Vermont, report cards in Minnesota, or mentoring in Connecticut.

State grants and other incentives for improvement must focus on both school practices and district practices.

A number of states have stimulated innovation in a small number of schools through grants and other incentives, which can serve as models. Some of these states now face the challenge of expanding without new resources. For example, Washington's Schools for the 21st Century absorbs the cost of

salaries for ten extra days for every teacher in the program. This cost statewide would be extremely expensive. Other states have learned that a pilot that has succeeded with volunteers may not succeed under a mandate for all. (See *Examples of State Pilots*.)

Nevertheless, some small-scale programs designed to stimulate innovation can have effects that are far greater than their size, both within the state and beyond. A number of states have borrowed ideas and even the name from Washington's Schools for the 21st Century pilot. These experiments help to meet the enormous need for concrete examples of ways to organize schools and districts. The New Generation Schools envisioned in the President's America 2000 initiative are intended to promote such models. However, strategies for disseminating information are critical, both for providing models to others and for promoting support for new approaches. Florida's restructuring program, for example, generated criticism until a statewide conference provided the opportunity for participating sites to present their accomplishments. A number of states—such as South Carolina and Washington—are moving on several fronts simultaneously to stimulate local innovation while reviewing and changing statewide policies. Others have consciously built new legislation or policies around the results of pilots, as in North Carolina's Senate Bill 2, Tennessee's proposed legislation, and South Dakota's planned expansion of rural development pilots that link schools and communities.

In addition to pilots, states and districts are experimenting with other strategies for moving from a few schools to all schools. These strategies may focus on particular regions, grade levels, or content areas instead of individual schools. In Idaho, the Governor has requested additional funds to develop new curriculum and assessment materials that focus on higher-order thinking skills for grades K-4. Other proposals targeted to the primary grades encourage

Examples of State Pilot Programs

The California Legislature has appropriated more than $6 million for the planning year of a five-year pilot to improve student learning through school and district restructuring demonstrations. Planning grants will be awarded to about 300 schools, with outreach and support provided by a new California Center for School Restructuring under the state department of education. A parallel initiative, Every Student Succeeds, funds pilot schools and districts to coordinate categorical programs, the regular program, and local community, health, and social services.

Three years ago, Maine awarded ten grants to schools undergoing restructuring. This fall every school in the state will receive a report based on interviews with the pilot school participants, describing what has changed for students and teachers and the major lessons from their experiences. A new grant program will begin next year with awards to schools within four developmental stages of systemic change: exploration, planning, implementation, and reflection/continuation.

In 1990, Vermont awarded Challenge Grants for Reinventing Schools to eleven schools and districts to pursue state-of-the-art restructuring plans. Vermont's Department of Education provided assistance to the teams developing proposals and ongoing assistance and training throughout the process of implementation. The original grants ranged from $10,000 to $40,000. The state is exploring ways to provide longer term financial support that acknowledges the commitment required to create conditions for sustained change. A conference will be held in the fall to share early lessons and develop a conceptual framework for school restructuring.

districts to eliminate grade levels, retrain teachers, and reduce class size. New York has targeted Rochester as an experimental site and supports the National Center on Education and the Economy to assist Rochester. Carnegie Corporation of New York concentrates on middle schools and the Coalition of Essential Schools focuses on high schools.

In the long run, even the most successful innovations will not influence the vast majority of schools and districts unless there has been a simultaneous transformation of the larger system. Consequently, a growing number of those involved in targeted efforts are recognizing the importance of linking successful efforts to state policy. For example, Carnegie's middle school effort includes grants to twenty-seven states to influence policy decisions that affect middle school restructuring. In Arkansas and New Mexico, the Coalition of Essential Schools and other school-based restructuring efforts are supported through state policy. The Coalition of Essential Schools and the Education Commission of the States, along with John Goodlad of the University of Washington, have joined forces to simultaneously influence state policy, individual high schools, and institutions of higher education.

Similarly, the National Science Foundation has created State Systemic Initiatives, which are five-year grants to states with demonstrated collaboration among state leaders, teachers, business and industry, parents and community, and colleges and universities. The initiative is designed to integrate what had been separate pieces of reform in science, mathematics, and engineering, and link them to state policy and systemic change.

Choice

Under the right conditions, allowing students and parents to choose a public school for their children also can stimulate innovation. Choice plans stimulate innovation when they are part of a series of actions designed to increase the range of alternatives and provide knowledge and access to parents and students. Choice remains controversial; several states defeated voucher initiatives in recent elections. In Alaska, the Governor ran on a platform that supported a voucher system. Current efforts to expand choices for parents and students include statewide choice in Iowa and Minnesota; in both cases, few parents avail themselves of the opportunity.

Minnesota also has a range of postsecondary options high school students can choose. District Four in New York City created thirty alternative programs over a fifteen-year period. In these two cases, where options already existed, students and their parents have exercised their right to choose. The New York effort is the most often cited example of choice as a stimulus for innovation. At the elementary level, most students attend their neighborhood school. At the junior high level, all students and their parents participate in a formal process of choosing their school. District Four's experience demonstrates the time involved in creating a range of alternatives and the importance of district support to implementing change and creating the necessary information system for parents. Parents are notified of their options by a variety of means, including native language brochures, school meetings and visits, and neighborhood outreach efforts.

There is growing discussion of extending choice beyond existing public schools. In some cases, such as in Wisconsin, choice has been extended to allow disadvantaged students to attend nonsectarian private schools. In others, it is available to any group or agency that creates a school meeting certain criteria. Minnesota passed legislation that permits governmental jurisdictions, including local school boards, to contract with interested parties from existing schools and museums to establish "charter" schools that would operate outside most existing regulations.

Under any form of choice, but particularly when options extend beyond the public sector, safeguards to protect against racial imbalance in the schools

and ensure the constitutional rights of individuals must be in place. In Minnesota, for example, only minority students have the option of leaving the three largest metropolitan school districts. Similarly, in Arkansas and other states, interdistrict and intradistrict choice are available to all students provided racial balance is not adversely affected. In a number of states, to prevent misuse of choice to recruit athletes from other districts, there are also restrictions on eligibility to participate in sports. States must also concern themselves with the growing number of students who do not have parents, or even surrogate parents, who are able to take advantage of choice. Choice systems may also need to cover the costs of producing and disseminating information and providing transportation to ensure equal access for all students.

The Role of Parents and the Community

Schools cannot improve significantly without the support of parents and the larger community. As the proportion of adults with children in school decreases, the involvement of adults other than parents becomes increasingly important. The major shift in the structure of the family and the economy requires reconceptualizing the traditional involvement of parents in their children's education and discovering ways to involve the broader community.

States are responding to this change by creating new programs and mechanisms that involve parents in several ways. Virtually all forms of site-based management include parents on the management group; in Chicago, where schools have broad decisionmaking authority, parents are the voting majority. Other efforts are underway to provide education to parents on ways to support their children's learning. Thirty states have implemented "Parents as Teachers," a home-school partnership developed in Missouri to help parents as children's first teachers. Missouri has a number of other programs to promote parent and community involvement, including Adults and Children Together, which gets parents and senior citizens into schools. Senior citizens not only contribute significant services to schools, but also are a potentially strong ally. Similarly, Arkansas has introduced the Home Instruction Program for Preschool Youth (HIPPY) to counties across the state.

States and districts are experimenting with a range of alternatives for getting parents and communities recommitted to their schools. For example, Satellite Schools in Dade County, Florida, are testing the concept of locating schools and extended-day programs on the sites of businesses that employ significant numbers of parents. This arrangement utilizes business facilities and public school staff, allowing parents easy access to their children and the school during the day and eliminating the need for separate transportation.

Restructuring education requires new roles for parents and community members as well as professionals.

Models, Networks, and Assistance

States are also stimulating innovation by encouraging schools and districts to experiment on their own and to join national networks, and by providing or brokering assistance. Many of these efforts are made possible by private foundation grants and the efforts of entrepreneurs to disseminate effective approaches to improvement. Through these networks, educators have an opportunity to implement the ideas of James Comer, Henry Levin, Ted Sizer, Robert Slavin, and other designers of programs for school change. The major teachers' organizations, the National Education Association and the American Federation of Teachers, also sponsor networks to support restructuring initiatives.

Re:Learning, a joint effort of the Education Commission of the States and the Coalition of Essential Schools, seeks five-year commitments, including a financial commitment, from states to stimulate the

creation of Coalition schools and to support the exchange and spread of practices. School and state staff in the seven Re:Learning states (Arkansas, Colorado, Delaware, Illinois, New Mexico, Pennsylvania, and Rhode Island) participate in a variety of national conferences and meetings. The Southwestern Bell Foundation, among others, makes funds available to states to pursue Re:Learning.

New Mexico has developed regional networks that provide mentoring teams to the forty-eight participating schools. The state department of education wants to build on the Re:Learning networking approach to increase the number of people involved.

In Illinois, state and local leaders extended their Re:Learning alliance to include ten high schools in Chicago. The state board of education further broadened the scope by linking two other programs—Accelerated Schools for the Disadvantaged, directed at elementary schools, and the Urban Education Partnership Program, resulting in a K-12 network of support.

The National Alliance for Restructuring Education, supported by the MacArthur Foundation, the Pew Charitable Trusts, and its membership, provides technical assistance and collaborative development projects to participating districts and states. The Danforth Foundation, among others, invests in developing and strengthening the skills of administrators, and in activities that link state and local educators and policymakers within and across states. The MacArthur Foundation provides support for training school councils in the Chicago schools, among its many education programs. Delaware is providing innovative leadership training at summer demonstration sites through a grant from Kraft General Foods. The Dupont corporation has provided executive training in participatory management for school administrators in several states, including Kentucky, Louisiana, Mississippi, Tennessee, and Texas.

State agencies are also providing opportunities—such as statewide conferences in Arkansas—for innovating schools to exchange ideas. Michigan has formed a state university, business, and industry partnership that has contracted with higher education institutions to provide technical assistance to districts to eliminate tracking and grade levels.

Creating Systemwide Conditions for Innovation

In addition to linking content and stimulating innovation through pilot projects and incentive grants, the challenge is to change structures in the system that work to maintain the status quo. Even if states are successful in linking content and creating a number of innovative schools, these successes will not reach all or even most schools without corresponding changes in how the system operates. States are trying to figure out how to provide the kinds of flexibility and decentralization that encourage schools and districts to restructure while creating a new system of accountability in the absence of good measures of performance. States are looking to changes in law, policy, and practice ranging from removing virtually all legislative restrictions on local practice to state requirements for schools to create their own governing bodies.

The real challenge is to change the structures in the system that reinforce the status quo and stifle the spread of innovation.

Flexibility: From Waivers to Deregulation

A number of states are experimenting with waivers—offering procedures by which schools and districts can be exempted from particular rules or regulations. In fact, some states have always had such provisions on the books but they have rarely invoked them. Where waivers have been highlighted as a new form of flexibility—especially in the context of experimental projects—states have found that

waiver provisions have not been used to the extent they had predicted. Such provisions can play an important symbolic role in communicating a new stance on the part of the state and thereby stimulate innovation. But they are not a substitute for a thorough state-level analysis to determine which rules and policies support a high-performance system and which pose barriers that should be removed.

Providing broad flexibility through the removal of unnecessary regulations communicates the goal of significant change more powerfully than the opportunity to request waivers, because it focuses attention on restructuring the school rather than on individual rules. The waiver process also can be undermined by a bureaucracy that does not share the goals of restructuring—by rejecting requests, for example.

Waivers and other relief from regulations are also used by states as rewards for improvement, signaling increased trust for schools already moving in the right direction. South Carolina rewards schools that meet certain improvement criteria with deregulation; early evidence suggests that total deregulation stimulates innovation far more than waiver options. (See also *South Carolina's Incentives for Improvement and Innovation* on page 32.)

States are beginning to look at all their rules and policies governing education. Vermont is analyzing every policy with respect to its goals for restructuring, as is Florida through a regulatory review. Tennessee has proposed legislation that would repeal some 3,700 rules and regulations as part of a new thrust to focus on results. Kentucky's legislation replaces a highly regulated system with one that is outcome-based, requiring site-based councils in all schools, ungraded primaries, and half-day preschool.

Deregulation is a more powerful strategy than a waiver option; innovation requires deregulation plus mechanisms for providing extensive staff development.

In Washington, a bill proposed by the Governor and now under consideration by the legislature would replace virtually all specific state requirements for instruction with performance-based outcomes for students. The legislation would replace all requirements concerning the length of the school day or year with a general requirement for the total number of instructional hours. It also would replace current requirements for specific courses and contact hours for particular subjects with a general description of subjects to be covered, through interdisciplinary approaches if desired. There would a process for establishing performance-based outcome goals for all students and a corresponding statewide assessment system.

A number of states are contemplating removing specific requirements—for example, abolishing Carnegie units, eliminating grade levels in the primary grades, and abolishing tracking in secondary schools. States are finding, however, as did schools with waiver provisions, that it is often necessary to remove a number of requirements to increase flexibility significantly. For example, ending Carnegie units and course requirements in high schools will not spur major curriculum improvement unless colleges and universities also change their admissions requirements.

Decentralization

Decentralization adds formal authority to the flexibility achieved under deregulation. States that are predominantly rural and traditionally have a minimal state role in education have effectively been decentralized for years. However, in highly centralized states and large districts, decentralization carries a very different meaning.

State leaders recognize that decentralization, while an important component of restructuring, is not in itself a stimulus for change. The issue is not really one of centralizing or decentralizing, but rather which

kinds of decisions are best made at which level of the system. Decentralization is most effective with strong central direction, a clear vision, and the supports that prepare educators for new roles. Some states, like California, argue that deregulation and decentralization should follow new curriculum and retraining. Other states, like Washington, do not get directly involved in curriculum and instruction issues, but propose freeing local sites to pursue their own course within the context of state goals for performance and corresponding assessment.

Hawaii, which operates as one large district, has passed legislation that phases in all schools to site-based management over a period of ten years. However, it has yet to resolve the degree of autonomy, particularly with regard to staffing, since teachers are civil servants hired by the state. Kentucky requires governing councils in all schools, with authority over staffing, curriculum, and materials.

Districts are the primary locus of decentralization and many have taken steps in that direction under the rubric of site-based management. However, there are very few examples of decentralized districts in which schools have more than token authority over marginal decisions and in which the district is providing leadership and the conditions necessary for school improvement. Moreover, little attention has been paid to the need to train school board members, leaders, and central office staff in addition to school staff for dramatically new roles under a decentralized system. It requires a new set of skills for staff at all levels, including problemsolving, negotiation, working on teams, internal consulting, and decisionmaking.

The benefits of decentralization are realized only when school faculties have the additional time and training needed to carry out their new responsibilities.

At the school site, faculty cannot responsibly take on new management and decisionmaking roles without additional time. Where teachers have made significant progress in restructuring their schools, they have typically been given extra time. Examples include Washington's Schools for the 21st Century, which subsidizes ten additional days for every faculty member, and Jefferson County, Kentucky, which provides stipends and release time for participating teachers.

Few states have taken steps to prod districts to decentralize. The recent action of Colorado's Governor in drawing up a new teacher contract in the Denver Public Schools is unprecedented. (See *The Governor and the Denver Public Schools* on page 30.) The dramatic change in governance structure in the Chicago Public Schools was made possible by a change in state law that radically decentralized the school system and placed parents, community members, teachers, and principals in charge of every school. Wisconsin has recommended breaking Milwaukee into smaller districts.

States must press decentralizing districts to provide the necessary leadership and support for schools to change.

Accountability: Reporting, Incentives, and Consequences

The basic premise of a performance-based system is that authority and flexibility are granted in exchange for accountability for results. The essence of accountability is to provide assurances to those inside and outside the system that schools are moving in the right direction. There is perhaps no other area in which the rhetoric is harder to match with action, nor one in which the stakes are higher.

States cannot create and maintain support for restructuring education without assurances about accountability. If schools are not accountable—if there are

no consequences associated with the failure to perform adequately—public and business support will not be forthcoming.

However, in the absence of agreed upon standards and adequate performance measures, states are in a serious bind. Assessing improvement in performance with existing narrow measures neither serves as an incentive for the system to change nor adequately measures progress toward higher performance goals such as problemsolving, application of skills, and workforce preparation. Deferring implementation of an accountability system until new measures are in place is not a politically acceptable solution.

Even with standards and measures in place, there are still difficult questions about the structure of an accountability system. Given that the goal of accountability is both to keep schools moving in the right direction and to keep the public informed, an effective accountability system must involve some form of regular reporting, incentives for improvement (both inducements and rewards), and consequences for persistent failure.

States have taken a number of actions on the reporting front, with a variety of types of state reports as well as district and school report cards. Report cards tend to present inputs, such as expenditures, and traditional output measures—standardized achievement tests or minimum competency tests.

The Governor and the Denver Public Schools

In April 1991 the Board of Education of the Denver Public Schools and the Denver Classroom Teachers' Association signed a historic contract negotiated by Colorado Governor Roy Romer. The Governor chose to intervene and use a deadlock as an opportunity to create a new way of doing business in the district by redesigning the entire contract instead of simply "splitting the difference" between the parties on disputed provisions. After days of public hearings, hundreds of letters, and discussions with local and national experts, the new contract was designed around a model of school-based, collaborative decisionmaking.

The contract divides power between the school board and Denver's 110 schools, delegating decisions that influence instruction to the schools and retaining school board control over those that require a central focus to protect values and priorities or achieve efficiencies. Thus the board controls the school calendar, bargaining, desegregation, finance, curriculum goals and evaluation, maintenance and construction, food services, and transportation. The schools control how time is scheduled within the work week, the school budget, how curriculum is structured and implemented, instructional delivery, and faculty selection.

Each school will establish a collaborative decisionmaking committee consisting of the principal, four teachers, three parents, a classified employee, two students, and an employer/business representative. The committee's composition can later be expanded or amended. Decisions will be made by consensus, with the principal able to break an impasse.

In each of the district's four administrative areas, Improvement Councils will be formed—with equal numbers of parents, teachers, and district officials—to assist schools in collaborative decisionmaking through facilitation, technical assistance, and training. These councils also will participate in ongoing training.

Other key elements of the contract include salary raises for teachers for each of the next three years, an increase in starting salaries, and an incentive fund to reward schools that demonstrate innovation and leadership.

Hence, they do not press for the kinds of outcomes that are needed. Yet they serve the critical function of providing some information to the public that allows comparative judgments. Once standards and new assessments are in place, report cards will provide far more meaningful and useful information.

Incentives for improvement take a variety of forms. They include grants to schools, bonuses for individuals, and external pressures from employers, higher education, and the community. Several states offer incentive grants of two kinds: those that induce improvement and those that reward change. Those designed to induce improvement may have specific or general goals. For example, Florida offers incentive grants to create full-service schools. Oregon offers school improvement grants of $1,000 per pupil to schools with site-based management teams that determine how the funds are spent. In Missouri, the Governor proposed $1 million to establish a new venture capital fund. South Carolina offers three-year grants for innovation. (See *South Carolina's Incentives for Improvement and Innovation* on page 32.)

States also use incentive grants and other benefits as rewards; they are awarded to schools (or individuals) that have already met certain standards or criteria for improvement. For example, Utah will award $10,000 to twenty schools each year under its Schools of Excellence program. North Carolina will provide additional salary increments to teachers in districts that achieve its stated goals. The Texas Education Excellence Award System in the Governor's office rewards schools or districts that show significant gains in student performance. A number of states reward improving schools with added flexibility in the form of regulatory relief. South Carolina deregulates improving schools that qualify; Ohio provides waivers to improving schools.

Employers are beginning to offer incentives designed to influence students directly. With help from the state Business Roundtable, Vermont employers are making commitments to look at student transcripts, and in the future, student portfolios, in the hiring process.

The question of whether to establish consequences for failure to improve generates the most disagreement in the accountability debate. There is broad agreement that there must be consequences; dismally failing schools should not be permitted to continue year after year. But there is considerable disagreement over how success and failure should be determined and what form consequences should take. What measures should judgments be based upon and what criteria should be used? Should judgments be applied to individuals, schools, or districts? What is the downside of making erroneous judgments?

States agree that the first response to failing schools must be to provide assistance to the schools. In practice, however, such help can take the form of documenting problems to justify action instead of assistance for improving. But if failure persists, what happens? Who is responsible? Legislatures for failing to provide adequate resources for retraining or social support services? Districts for failing to provide flexibility and assistance? Schools for the failure of their faculty as a group to improve? Individual teachers for being unwilling or unable to improve their instruction? The same issues apply to colleges and universities that train educators and have no incentive to improve under existing state accreditation systems that approve virtually all programs.

States will answer these questions differently. A few states threaten state takeover—Kentucky, New Jersey, and Rhode Island have actually done so. Rhode Island was the first state to assume control of a local school district at the request of the district. In Kentucky and New Jersey, preliminary indications are that state takeover of failing systems cannot effectively address the entrenched problems of these districts. West Virginia allows students

South Carolina's Incentives for Improvement and Innovation

South Carolina has created several types of incentives—financial and regulatory—to foster innovation and systemwide improvement. The incentives, and the criteria for eligibility, are not locked in place, but are reviewed and revised as the state learns from their implementation and as their emphasis shifts. With a new emphasis on thinking skills, the criteria for eligibility are under review since they are based primarily on standardized achievement test scores. South Carolina's incentives include:

School Incentive Reward Program. Each year, schools meeting criteria based on student achievement, student attendance, and teacher attendance receive monetary rewards. The achievement criteria include both reading and mathematics and are based on a gain index derived from prior performance. Schools compete for the awards within five groupings based on the resources of the schools. Individual School Improvement Councils, which are composed of the principal, elected parents and teachers, and appointees of the principal, decide how the grant funds—approximately $35 per pupil—should be spent.

Deregulated Schools. Schools that have won incentive rewards for two out of four years, with no prior accreditation violations, are eligible to become "deregulated schools." Approximately 150 schools have been so designated and are free to create programs without regard to state regulations governing areas such as class size and schedule, teacher assignment, accreditation, time spent on each subject, and use of space. As a result, schools are implementing innovations including multi-age grouping, team teaching, integrated approaches to curriculum, and new subjects and programs.

Innovation Grants. Any school is eligible to submit a proposal for a one-year $5,000 planning grant or a three-year implementation grant of up to $90,000. Recipients may request waivers from state regulations but few have done so. A panel chosen by the state department of education selects the best proposals. About seventy schools have received implementation grants. Although the money must be used to foster comprehensive change, there is a broad range of activities among recipient schools. Most schools have allocated the funds toward extra salaries and materials. One school has allotted more staff time to create an interdisciplinary curriculum, while another is using the funds to create a Saturday program to address student discipline issues. Another school has used the funds to attempt to incorporate technology into the classroom.

who attend a school that has been declared academically deficient to attend another school of their choice. Tennessee's proposed accountability system threatens removal of the superintendent after two years of decreasing performance. Others threaten district dissolution or absorption by another district—essentially variants of consolidation.

So far, there are few examples of attempts to seriously rethink accountability. The examples that do exist have yet to be tested in practice. Kentucky's may be the most far-reaching in principle, with a multi-stage process that leads to teacher probation and school closure if intervention efforts fail. Both rewards to schools that translate into teacher bonuses and declarations of deficiency are based on a set of complex calculations using an Education Improvement Index and formulas to calculate improvement.

Rewards and sanctions can stimulate change when used appropriately; they can undermine improvement when based on ill-conceived definitions of success and failure.

State Capacity for Support and Assistance

For states to provide the support and assistance needed to restructure districts and schools, they must restructure and strengthen their own departments of education. Departments of education need a very different kind of capacity than they currently have, requiring a dramatic change in their orientation and organization. Kentucky actually abolished and re-created its department of education under the Education Reform Act. A number of states are making plans to significantly reorganize their departments of education to shift their focus from monitoring and enforcement to facilitating and supporting school improvement. The technical assistance these departments provide is especially critical to schools with high concentrations of at-risk students. Such changes also provide a model for districts that must undergo the same shift in roles and functions to support their schools.

Although several states have exciting plans in the works, in most cases reorganization appears to result more from budget considerations than a restructuring agenda. Changes tend to involve reduction in size, addition or removal of regional offices, and no indication of training for new staff roles and functions. In contrast, the reorganization of New Mexico's Department of Education to support education reform emphasizes long-range planning and functional work groups that cut across traditional areas. Helped by the state board's repeal of numerous regulations, staff are learning to work and function in a less bureaucratic, more participatory environment that values assistance to schools and districts.

Virginia's new state superintendent is "reconceptualizing" the department of education to be service-oriented, research-based, and collegial. New Jersey's reorganization is directed specifically at strengthening assistance to urban schools by creating a new division to coordinate services targeted to urban districts. Florida and Vermont are conducting internal self-examinations as a first step in their departmental reorganization.

Downsizing a state department of education, reorganizing divisions, and adding or subtracting regional offices are not the same as restructuring unless they involve designing new roles and retraining state staff.

Sound systems of finance, data, and information flow are critical to the smooth functioning of any organization; education is no exception. States and districts are beginning to develop long-range plans around technology-based communications systems, both for gathering data on enrollment, costs, outcomes, and other factors and for sending data to districts and schools. This kind of information flow is especially critical in decentralized systems, where schools need access to district and state information and districts and states need access to school-level data. Kansas is installing a statewide fiber optics system that will permit two-way communication between teachers in different locations. Colleges and universities, business and industry, local governments, and a variety of social service agencies will also have access to the system. Hawaii is just beginning to install a similar system. Such systems can serve multiple purposes, including some kinds of professional development, curriculum materials, and distance learning for school faculty, students, and parents.

Creating and Maintaining a Quality Workforce

To create and maintain a quality workforce, states and districts must have a system for attracting and retaining quality professional and support staff, as well as strong preparation programs and ongoing learning for teachers and administrators already on the job. Over the last decade, states have made a substantial investment in these areas, including raising salaries and standards, creating incentives, and

initiating new recruitment efforts, especially to attract minority candidates. But in spite of these major efforts, there has been little impact on teaching and learning, from primary grades through higher education.

It is unrealistic to project that states and districts will be able to afford the salary levels that would lure vast numbers of high-caliber college students into education. As long as teacher supply and demand projections assume that schools will continue to be organized with one licensed professional assigned to a classroom of students, salaries and quality will never reach competitive levels. However, this organization is based on a model of teachers talking and students listening. If, instead, students are actively engaged in a variety of learning activities in the school and in the community, different staffing patterns will become both necessary and viable. Students will need more interaction with a larger number of adults, but these adults will not all have to be licensed teachers. Various configurations of staff should be considered, including teams of professionals augmented by paraprofessionals and professionals from health and social services, community mentors, local university students, and student peer tutors.

Experimentation with new staffing patterns is needed to address quantity and quality problems in the teaching profession.

An analogous line of reasoning applies to those who lead the schools—principals. As the demands of the job increase, the gap grows between job requirements and the skills of applicants. As new organizations for schools emerge, administrative jobs also will take new forms, especially as schools become more autonomous.

Continuing Challenges

As states pursue their restructuring agendas, they will continue to encounter a set of fundamental issues endemic to any major systemic transformation. These issues include the following:

Limited Resources. When budgets are on the rise, there is little pressure for considering radical transformation. Under tight budgets, the absence of such "business as usual" opens the door for totally rethinking how funds are allocated. It can lead to significant progress in restructuring if state leaders guide decisions with a long-term view of restructuring goals; make fiscal decisions on substantive grounds; look across the whole budget rather than at isolated pieces; and use processes like benchmarking in the private sector, where the best practices in the world are identified and studied to learn how they operate and what they cost.

Few states have done serious and thorough analyses of which rules and regulations contribute to restructuring and which stand in the way, or which decisions should be made at which level of the system, or how multiple, fragmented programs could be aligned with the goals of restructuring. These kinds of analyses are among a number of important but inexpensive steps that can further the restructuring agenda. Ultimately, restructuring will succeed only with strong state and local leadership, investment in training and retraining, and a commitment to preparing children for school. Creating new delivery mechanisms, technology-based or otherwise, will be an essential part of this agenda.

Equity. The combination of shrinking resources and higher standards for all students requires special attention to students from minority and disadvantaged backgrounds. The restructuring agenda has the potential to narrow the gap between majority and minority students by ensuring a challenging curriculum for all, but it also has the potential to

widen the gap if supports are not put in place to ensure that at-risk students are prepared to take advantage of such a curriculum.

A number of elementary programs have been designed specifically to increase the success of at-risk students; such approaches accelerate rather than water down the curriculum, provide students with intensive instruction and support teams, and strengthen links between school and community. At the high school level, schools that are successful with at-risk students, including recent immigrants with little or no prior schooling, are those that offer a range of support services and alternative programs housed within the school—work/study, intensive language development, parenting and employment skills, and health services.

However, these approaches are used on a limited school-by-school basis, and are rarely tied to local or state policy supports. A positive trend is evident in the language of current school finance reform. Traditionally, equity has been defined in terms of dollars, with court cases revolving around equalizing per pupil expenditures across districts. The language of equity has shifted as a consensus has formed around what constitutes vital and essential services for children at risk of educational failure. Preschool, kindergarten, elementary school counseling, early elementary intensive reading programs, and summer school are essential in concert with a challenging curriculum. The irony is that such services are far more likely to exist in communities with a small percentage of at-risk students; the higher the proportion of at-risk students in a community, the less likely it is that these services are provided.

Facilities. Not far beneath the surface in most states is a crumbling physical infrastructure—school buildings that are old and unsafe. Few states can afford to replace all of these buildings. Cost-effective approaches include expanding use of the facilities—from year-round schooling to evening and weekend community activities. Other solutions involve locating schools at corporate facilities and breaking down the linkage between schools and buildings. The design of most school buildings, including new ones, does not facilitate the kinds of changes engendered by restructuring—workplaces for teachers to work together, rooms of different sizes for different purposes, and even structures that can accommodate several schools. Technology, from computers to cable and telephones, also has implications for school architecture, as does any expansion of the kinds of social and health services offered in school settings.

Technology. Technology will play an increasingly central role in education, both in management and learning. Technology enhances communication in decentralized systems, serves as a vehicle for providing new knowledge and training to school staff, and supports many administrative and instructional activities, from report cards and lesson plans to distance learning and science simulations. Future visions of libraries of lessons, activities, and materials available via satellite, videodisc, and electronic networks among teachers and schools are becoming reality. States need long-range plans for use of technology, with the recognition that the technology will continue to evolve rapidly. States already are planning statewide and national links through fiber optic networks. States also have an important role to play in providing districts and schools with guidance on hardware purchases so that locals do not become locked into expensive systems with limited functionality and future use. With help from their business communities, schools need to develop better ways of utilizing outmoded technology, since they will never be able to afford to keep up with the latest technology. States and districts are also seeing the need to equip educators with access to technology and support before expecting them to use it productively.

Governance and Finance Mechanisms. State-level governance arrangements in education can inhibit thoughtful development and implementation of long-term policies. Because Governors, chief state school

officers, state boards of education, and state legislatures are each responsible for setting education policy, states may have multiple and often conflicting agendas. The situation is frequently exacerbated by vigorous lobby groups concerned primarily with resource issues. In addition, most K-12 governing structures are totally distinct from higher education. No mechanism for communication or collaboration exists. The schedule of state budget decisions also inhibits planning at the local level. In many states, districts do not know what their budget will be for the next year until near or after the start of the school year—in either case, long after planning, hiring, and placement decisions must be made. On the other hand, school finance in a few states is actually propelling restructuring and there are signs that the language is shifting from a sole concern with equal dollars to a concern with what those dollars buy.

Tracking Progress

The critical linkages described previously and illustrated in Figures 1 and 2 provide a framework for states to assess where they are in their restructuring agenda. States start in different places, with different priorities and different traditions. Yet it might be useful as a rough map to respond to a set of questions that capture what is and is not in place, which pieces are linked, and what the next steps are. The following questions are derived in part from questions proposed in an interim report to the National Education Goals Panel on indicators of state progress toward systemic education reform. Alternatively, states may wish to create their own restructuring framework against which to assess progress.

Have you created:

- A vision of and agenda for creating a performance-based system including a strategy for mobilizing public support and building state-level coalitions.

- A participatory process for establishing challenging state-level goals for student performance that emphasize critical thinking, application of skills, problemsolving and understanding within and across disciplines.

- Actions that demonstrate that all children can learn at high levels, including policies to end tracking, to decrease misclassification of students, and to ensure a challenging curriculum for all students.

- A process for developing curriculum goals or frameworks that establish high expectations, or stimulating the local development of a demanding curriculum for all students.

- Linkages between student learning goals, curriculum, and textbook and material selection, assessment, staff development, and teacher preparation.

- A plan for developing or otherwise obtaining state-of-the-art performance instruments that measure thinking and problemsolving skills and other challenging performance goals.

- Policies that create a variety of mechanisms for providing new knowledge and skills to teachers and administrators, including uses of technology, school-based consultants, and summer institutes.

- Incentives, through changes in licensing or certification or other vehicles, for higher education to substantially strengthen teacher and administrator preparation.

- Incentives for innovation in schools and districts, through grants, pilot programs, or other mechanisms, and plans for learning from the experience.

- Reduction in regulation and other means for increasing the flexibility school faculties have to improve teaching and learning.

- An accountability system based on new assessments that has a range of incentives for success and consequences for persistent failure to improve, including a system of aggressive assistance.

- Incentives and assistance for districts to decentralize decisionmaking and change central office organization and roles to support schools.

- Incentives, training, and authority for school staff to make instructionally important decisions and to involve their communities.

- Reorganization and training of state department of education staff to shift from monitoring and enforcement to assisting and facilitating local improvement efforts.

- Assurances that students have access to basic health and social services, including access to adult role models.

- A range of actions for early intervention—including access to preschool—and lifelong learning.

Conclusion

The national education goals are ambitious and, as the Governors have acknowledged, require a fundamental restructuring of the system—a truly massive undertaking. States have a critical role to play, not only because of their constitutional authority and leadership position, but also because of the many levers at their disposal to set the conditions for change and the course of improvement for all schools and all students. The importance of state leadership is evident across the country as states tackle the restructuring agenda.

The state role becomes even more important in light of President Bush's new America 2000 strategy designed to stimulate innovation through research and development and grants to create new schools. Without state systems in place to support and spread innovative practices to all schools, the nation will not have a high-performing education system. With new systems in place, the combination of dramatically new models of schools and systemic change is powerful and will ensure tremendous progress toward creating a world-class public education system.

As states pursue their restructuring agendas, it is critical to avoid locking changes in place. From new curriculum to assessment to accountability systems, there must be built-in mechanisms for review and revision. The goal is not to replace an existing system with a new set of answers, but to create a dynamic public education system that has the flexibility to continue to improve and adapt.

Appendix A. National Education Goals and Objectives

Readiness

Goal 1
By the Year 2000, All Children in America Will Start School Ready to Learn.

Objectives
All disadvantaged and disabled children will have access to high-quality and developmentally appropriate preschool programs that help prepare children for school.

Every parent in America will be a child's first teacher and devote time each day helping his or her preschool child learn; parents will have access to the training and support they need.

Children will receive the nutrition and health care needed to arrive at school with healthy minds and bodies, and the number of low-birthweight babies will be significantly reduced through enhanced prenatal health systems.

School Completion

Goal 2
By the Year 2000, the High School Graduation Rate Will Increase to at Least 90 Percent.

Objectives
The nation must dramatically reduce its dropout rate and 75 percent of those students who do drop out will successfully complete a high school degree or its equivalent.

The gap in high school graduation rates between American students from minority backgrounds and their non-minority counterparts will be eliminated.

Student Achievement and Citizenship

Goal 3
By the Year 2000, American Students Will Leave Grades Four, Eight, and Twelve Having Demonstrated Competency Over Challenging Subject Matter Including English, Mathematics, Science, History, and Geography, and Every School in America Will Ensure That All Students Learn To Use Their Minds Well, So They May Be Prepared for Responsible Citizenship, Further Learning, and Productive Employment in Our Modern Economy.

Objectives
The academic performance of elementary and secondary students will increase significantly in every quartile, and the distribution of minority students in each level will more closely reflect the student population as a whole.

The percentage of students who demonstrate the ability to reason, solve problems, apply knowledge, and write and communicate effectively will increase substantially.

All students will be involved in activities that promote and demonstrate good citizenship, community service, and personal responsibility.

The percentage of students who are competent in more than one language will substantially increase.

All students will be knowledgeable about the diverse cultural heritage of this nation and about the world community.

Mathematics and Science

Goal 4
By the Year 2000, U.S. Students Will Be First in the World in Mathematics and Science Achievement.

Objectives
Math and science education will be strengthened throughout the system, especially in the early grades.

The number of teachers with a substantive background in mathematics and science will increase by 50 percent.

The number of U.S. undergraduate and graduate students, especially women and minorities, who complete degrees in mathematics, science, and engineering will increase significantly.

Adult Literacy and Lifelong Learning

Goal 5
By the Year 2000, Every Adult American Will Be Literate and Will Possess the Knowledge and Skills Necessary to Compete in a Global Economy and Exercise the Rights and Responsibilities of Citizenship.

Objectives
Every major American business will be involved in strengthening the connection between education and work.

All workers will have the opportunity to acquire the knowledge and skills, from basic to highly technical, needed to adapt to emerging new technologies, work methods, and markets through public and private educational, vocational, technical, workplace, or other programs.

The number of quality programs, including those at libraries, that are designed to serve more effectively the needs of the growing number of part-time and mid-career students will increase substantially.

The proportion of those qualified students, especially minorities, who enter college; who complete at least two years; and who complete their degree programs will increase substantially.

The proportion of college graduates who demonstrate an advanced ability to think critically, communicate effectively, and solve problems will increase substantially.

Safe, Disciplined, and Drug-Free Schools

Goal 6
By the Year 2000, Every School in America Will Be Free of Drugs and Violence and Will Offer a Disciplined Environment Conducive to Learning.

Objectives
Every school will implement a firm and fair policy on use, possession, and distribution of drugs and alcohol.

Parents, businesses, and community organizations will work together to ensure that schools are a safe haven for all children.

Every school district will develop a comprehensive K-12 drug and alcohol prevention education program. Drug and alcohol curriculum should be taught as an integral part of health education. In addition, community-based teams should be organized to provide students and teachers with needed support.

Appendix B. Restructuring Frameworks

Strategies for the School Years
National Governors' Association

What Restructuring Is
National Governors' Association

Essential Components of a Successful Education System
The Business Roundtable

Systemic School Reform
Center for Policy Research in Education

A State Strategy for Reform
Education Commission of the States

Seven Components of the Restructuring Process
National Alliance for Restructuring Education
National Center on Education and the Economy

Strategies for the School Years

National Governors' Association

The following broad strategies provide building blocks for state and local policymakers, educators, and community members to invent the schools our children need now and into the next century. They are interdependent: no single strategy will make an enormous impact. They are all required for lasting departures from current practice.

Set high expectations for student performance.
- Determine what students need to know and be able to do.
- Make the development of new assessment tools a top priority.
- Challenge educators to eliminate ability grouping and tracking.
- Strengthen school curriculum.
- Challenge parents to assume more responsibility for their children's learning.

Hold schools accountable for each student's learning.
- Design incentives for improvement, including rewards and sanctions linked to school performance.
- Determine interim strategies for school accountability, until new assessment tools are developed.
- Shift the role of the state department of education to assistance and, when needed, to intervention.

Decentralize authority and give school staffs the tools and flexibility they need.
- Create incentives for districts to decentralize school management and governance.
- Review the entire regulatory system.
- Provide the assistance district and school staff need to change what they do.
- Give educators time.
- Promote the use of emerging technologies.
- Rethink school finance policies, especially in light of the shift of accountability and authority to the school level.

Overhaul instruction and leadership.
- Expand efforts to attract and retain first-rate teachers.
- Develop an outcome-based system for preparation and licensure that is linked to the skills and knowledge needed for new roles in schools.
- Stimulate new approaches to teacher preparation.
- Make professional development a vital part of the job.

Expand the range of choices and options for parents and students.
- Enable new providers to create schools.
- Give students more options regarding when, where, and how they learn.
- Help parents and students understand and take advantage of different choices.

Remove preventable barriers to learning.
- Ensure that students receive the health and social services they need.
- Lead the fight against student drug and alcohol abuse.
- Increase opportunities for work and further learning.
- Engage and support parents far more extensively in their children's learning at school and at home.

From *Educating America: State Strategies for Achieving the National Education Goals*, Report of the Task Force on Education, National Governors' Association, 1990.

What Restructuring Is

National Governors' Association

Restructuring represents a very different approach to reform. It is a systemic approach that acknowledges the complexity of fundamentally changing the way schools are organized in order to significantly increase student learning. It shifts the focus of reform from mandating what educators do to looking at the results their actions produce. Restructuring requires many pieces of the system to change, including the following.

- ***Curriculum and Instruction*** must be modified to promote the acquisition of higher-order—not just basic—skills by all students. Subject matter and teaching that is now superficial, fragmented, and repetitious needs to change to emphasize applying skills, deep understanding, and cohesive knowledge. School goals and assessment tools must reflect these higher-order skills. Teaching strategies must actively engage students in thinking rather than relegating them to passive roles and rote learning. This requires increased flexibility in the use of instructional time, learning activities that are substantially more challenging and engaging, and more varied grouping arrangements that go beyond conventional age-based groups and promote student interaction and cooperative efforts.

- ***Authority and Decisionmaking*** must be decentralized so the most educationally important decisions are made at the school-site, not at the central office or the state capitol. Teachers, administrators, and parents should work together to set the basic direction for the school and to determine the strategies, approaches, and organizational and instructional arrangements required to move in that direction.

- ***New Staff Roles*** must be developed so that teachers can more readily work together to improve instruction. New roles for teachers will enable effective teachers to support beginning teachers, to plan and develop new curricula, or to design and implement staff development programs. This is rarely possible under current arrangements where the teacher's role is largely limited to instructing and supervising students. Other staff roles also must change. Greater and more varied use of paraprofessionals may be considered. And innovations in staff roles will require even more of principals who must provide the vision to help shape new school structures and organizational arrangements, and the skill to lead talented teachers. Principals also must be willing to take risks in an environment that rewards performance rather than compliance.

  In district offices and state departments of education, restructuring requires analogous changes in roles. Administrators must shift from rule enforcement to assistance and, like teachers, anticipate continuous professional learning. Preparing educators for these new roles will require profound changes in professional preparation programs and in licensure and certification standards and procedures. Institutions of higher education must be prepared to respond to these challenges.

- ***Accountability Systems*** must clearly link incentives and rewards to student performance at the building level. Currently, accountability means holding schools responsible for complying with federal, state, and local rules and regulations. In the future, schools must have more discretion and authority to achieve results and then be held accountable for them. States must develop measures to assess valued performance outcomes of individual schools and to link rewards and sanctions to results.

- ***Comprehensive Service Systems*** must be developed to help children and families access the support that they need. Integrating health, social and educational services improves the efficiency and effectiveness of programs. States can facilitate coordination at both the state and local level by establishing coordinating councils and providing technical assistance.

From *State Actions to Restructure Schools: First Steps*, National Governors' Association, 1990.

Excerpts from:

Essential Components of A Successful Education System

The Business Roundtable

America's ability to compete, our democratic system, and the future of our children depend upon all our children being educationally successful.

The Business Roundtable, representing some 200 corporations, supports the national education goals developed by President Bush and the nation's Governors. The achievement of those goals is vital to the nation's well-being.

These are the essential components, or characteristics that the Roundtable believes are needed to provoke the degree of systemic change that will achieve the national goals through successful schools:

1. The new system is committed to four operating assumptions:

- All students can learn at significantly higher levels.
- We know how to teach all students successfully.
- Curriculum content must lead to higher-order skills.
- Every child must have an advocate.

2. The new system is performance- or outcome-based.

3. Assessment strategies must be as strong and rich as the outcomes.

4. School success is rewarded and school failure penalized.

5. School-based staff have a major role in making instructional decisions.

6. Major emphasis is placed on staff development.

7. A high-quality prekindergarten program is established.

8. Health and other services are sufficient to reduce significant barriers to learning.

9. Technology is used to raise productivity and expand access to learning.

The nine components should be considered as a comprehensive and integrated whole. While their implementation should be strategically phased in, if any one is left unattended, the chances of overall success will be sharply reduced.

The following groups have endorsed the Business Roundtable Essential Components:

Committee for Economic Development
Conference Board
National Association of Manufacturers

Systemic School Reform

Center for Policy Research in Education

This proposal addresses two fundamental problems with American education: the lack of a coherent, long-term set of policies to improve the system and the basic skills emphasis in instruction that pervades both policy and practice. The purpose of the strategy is to put the pieces of reform together in a coherent system that combines the vitality and creativity of bottom-up change at the school site with an enabling and supportive structure at the district and state levels of the system. The strategy focuses on the state and has six major interrelated components. The state should:

- Develop common vision of a high-quality educational system:

—Engage public and education professionals in development of challenging and engaging curriculum frameworks which establish what students are expected to learn.

—Frameworks should set out clear expectations for accomplishment in three to four year blocks to allow local districts and schools the freedom to determine how best to teach the content.

- Stimulate developers to design instructional materials that follow the guidelines of the curriculum frameworks and encourage the professional community to provide quality control assessments of those materials.

- Coordinate teacher professional development with curriculum frameworks.

—Pre-service teacher training should prepare future teachers to be able to teach well the content set out in the frameworks. Teacher licensing could require passage of an examination on the content of the frameworks and on the ability to teach that content.

—In-service professional development should focus on providing content and pedagogical training in line with the frameworks to currently practicing teachers as well as encourage ongoing professional dialogue about the content and pedagogy of the frameworks.

• Coordinate student assessment with curriculum frameworks.

—Examinations that students studied for should assess students every four years on the content of the frameworks.

—Results should be used for school-based accountability for resources necessary to provide both the professional development and the workplace environment that will enable teachers to effectively teach the content of the frameworks to all students.

• Work with state and district governance systems to build a common understanding of the systemic strategy and to reduce the production of fragmented and conflicting policies that would interfere with an overall systemic approach.

From "Systemic School Reform," by Marshall S. Smith and Jennifer A. O'Day of Stanford University, in *The Politics of Curriculum and Testing*, edited by Susan Fuhrman and Betty Malen and forthcoming this year from Falmer Press. Based on research conducted for the Center for Policy Research in Education, a consortium of the Eagleton Institute of Politics at Rutgers University, Harvard University, the University of Wisconsin at Madison, Michigan State University, Stanford University, and the University of Southern California for the U.S. Department of Education.

A State Strategy for Reform

Education Commission of the States

It is an exciting time for education reform in America. For the first time, the vision for what an education system can be is expanding dramatically. During the past decade, school reform focused primarily on K-12. Now, we see education reform has to be much broader. The system must meet the needs of an increasingly diverse student population and better serve a wider age group—infants and preschoolers need more services, and higher education needs improved teaching and learning. More than ever, the education level of our citizens will determine the quality of life we are able to attain.

Making fundamental change in how schools operate to help children learn is an enormous endeavor, one that cannot succeed without a thoughtful and comprehensive strategy to guide us. Incoming ECS Chairman Governor John R. McKernan Jr. of Maine has outlined several fundamental principles that underlie successful strategies:

- All children can learn.
- Fundamental change is needed.
- No single policy change will transform the system.
- The education system must be able to analyze and continually improve itself.

To overcome significant obstacles to reform, states must take the following actions:

- ***Lead the Discussion.*** Set clear expectations and develop a vision of an education system that will meet those expectations.

- ***Build Support.*** Establish broad-based public-private coalitions to support and help carry out both the vision and the strategy for systemwide restructuring.

- ***Communicate.*** Develop a communications strategy to make the arguments for restructuring and show what can be accomplished.

- ***Change Policy and Practice.*** Work with state and district leaders to make the policy climate support the long-term vision. Build on existing efforts and show how they relate to the vision for a different type of school system.

- ***Focus on Results.*** Start by using local sites to demonstrate how fundamental principles of restructuring work in real life. Over the longer term, use those results to reshape the education system.

Seven Components of the Restructuring Process

National Alliance for Restructuring Education
National Center on Education and the Economy

The goal of restructuring the education system is to raise the performance of all students to world-class standards. These seven components of the restructuring process apply to any complex organization undergoing systemic change, including districts and states. The components are interrelated and must operate together, as a unified whole for the restructuring process to move forward.

1. Leadership and Strategic Management

Leading and managing a restructuring effort requires communicating a vision for systemic change, a long-range strategic plan that orchestrates all the elements, and a capacity for continuous adjustment.

2. Commitment to Change

Restructuring education cannot happen without a broad-based commitment to change, to quality, and to continuous improvement and a culture that fosters problemsolving, invention, risk taking, and collaboration.

3. Societal Responsibility and Commitment

Transforming the education system requires shared responsibility, commitment, and support from the community beyond the school, from all levels of the system, as well as from business and higher education for high performance, integrated health and human service support systems, school-to-work transition programs, and lifelong learning.

4. Performance-Based Accountability System

A performance-based education system requires high standards and challenging goals for students, world-class curriculum and instruction that are demanding and varied, new performance assessments that measure higher-order skills, incentives for continuous improvement for students and educators, and consequences for persistent failure to improve.

5. Decentralized Decisionmaking

Decisions must be made at the most appropriate level; instructional and related structural decisions must be made closest to the action engaging the student. Types of site-based management involving school faculties, parents, and students are appropriate when accompanied by new roles and support services from the central office, state, and community.

6. Quality Workforce

A system for attracting and retaining quality staff and providing ongoing learning opportunities is essential for a system undergoing transformation. Education staff need support and time to learn how to assume new rules and responsibilities.

7. Supportive Infrastructure

The "invisible" systems for planning, management, communications, information, and finance must be designed to support the process of restructuring.

Appendix C: State Approaches to Improving Education Performance

Alabama

The Alabama Education Improvement Act of 1991 is the result of months of negotiations between the Governor and leaders of the business and education communities. The bill includes recommendations from the Alabama Education Study Commission, which was created following the Education Summit in 1989. The commission formulated seven state goals that are based on the national education goals. The legislation would affect most aspects of the education system. Provisions include site-based decisionmaking, waivers from state mandates for schools that reach standards, a core curriculum, planning for the use of technology in the classroom with specific timelines for implementation, alternative teacher certification, extension of the school year, interagency councils to coordinate efforts to ensure school readiness, incentives for research, and development of innovative local programs.

Alaska

Through an extensive public outreach process, the Alaska State Board of Education developed and adopted general goals and state outcomes for public education. To further these efforts, the state education agency is currently working on a statement of essential skills that outlines the benchmarks of student performance at all grade levels. The state department of education is working to integrate health and special education services, define outcome standards in conjunction with the vocational education community, and broaden assistance to small towns through the establishment of regional centers. Having run on a platform that supported a voucher system, the Governor has created a commission on school choice to examine the opportunities for greater choice in schools for parents and students. The state board of education is also beginning a program of deregulation to remove cumbersome rules and requirements on school districts. The first actions to be considered under this initiative focus on vocational education and pupil transportation. The board also will consider alternate routes to certification for teachers.

Arkansas

Arkansas' Restructuring Schools for Higher Order Learning project, in its fourth year, involves seventy-nine schools statewide in forty-four school districts. In addition, a major piece of legislation, Act 236, "Meeting the National Education Goals: Schools for Arkansas' Future" provides for the development of a ten-year plan for restructuring the education system. Emphasis is placed upon integrating state-wide curriculum frameworks, performance assessment tools, and professional development programs. To this end, the legislation calls for the state board of education to adopt learner outcomes and to set up a task force to design and implement a system of outcome-based licensure for teachers and administrators. A newly established Academy for Leadership Training and School Based Management for local board members, administrators, and teachers will provide educators in every school with the training and tools to determine the best way to achieve the goals. So that parents and the general public will be informed of progress, a new student performance assessment tool is being developed to be incorporated into school report cards. The legislation also establishes that schools and districts involved in the restructuring process will be awarded grants of up to $20,000 for planning and/or professional development activities.

Arizona

In conjunction with the Education Summit in Charlottesville and the development of the national education goals, Arizona policymakers and educators articulated state goals and "essential skills." The essential skills are a set of high curriculum standards that all students must attain. A new performance-based assessment system, developed by the department of education and a commercial test publisher, focuses teachers and students on the essential skills by stating the desired competencies and the guidelines for scoring throughout the test materials. Data from this assessment system will be reported on state and district annual reports. In 1984 the state initiated a pilot career ladder for teachers, which is now permanent.

Another bill provides support for sixteen schools to pursue restructuring efforts. These schools will have complete regulatory flexibility, and each school will have a planning committee composed of staff, parents, and community members. Emphasis is being placed upon ungraded first to eighth grades, integrating technology into the classroom, parental involvement, year-round schooling, and interdisciplinary education. Districts with large at risk populations may apply for greater funding. The state expects to double the number of preschool programs next year. The Arizona Minority Education Access and Achievement Cooperative is a partnership between the Arizona Board of Regents, the State Board of Education, and the State Community College Board to develop programs designated to improve the performance of minority students. Arizona also is beginning initiatives in the area of preschool and elementary foreign language instruction.

California

Restructuring activities are being guided by the Governor's call for a comprehensive approach to child development and the state education department's focus on performance assessment. The Governor is strengthening collaborative efforts by creating a cabinet-level secretary for child development and education. He also has proposed a five-year commitment to provide preschool for every low-income four-year-old in need of services, modifying the existing state preschool program to meet Head Start standards, helping school districts coordinate and integrate health and social services for children, expanding funding for mental health counseling in elementary schools, and training adults to serve as mentors to needy youngsters and as volunteers in the classroom.

Eighth- and twelfth-graders have been assessed through writing samples for the past four years. The California Assessment Program is being redeveloped to reflect individual student, teacher, and school performance. The business and political communities are increasingly insistent on having individual scores reported. Business also is becoming involved in the overhaul of the vocational education system, which will establish assessment tools to provide employers and students with a sense of student performance.

In addition, California is launching an ambitious school restructuring demonstration effort under the provisions of Senate Bill 1274. S.B. 1274 was sponsored by the California Business Roundtable and the state superintendent of public instruction. This spring, 300 to 400 school restructuring grants totalling $6.5 million will be awarded. Planning will focus on restructuring activities targeted to improving curriculum, instruction, and student performance. If funded by the legislature and Governor, large-scale demonstration grants (up to $200 per student) will be awarded in mid-1992.

Colorado

Colorado launched "Colorado 2000," an effort to focus every community in the state on achieving the national education goals. The state has adopted two approaches to reform: providing incentives for districts and individual schools to change, and developing state-sponsored projects. Incentive funding, recognition, and technical assistance are provided to fifty Governor's Creativity Schools to help implement restructuring initiatives. Working with the Colorado Department of Education and with business and higher education partners, the schools have developed a statewide network to promote innovation and provide support. The Governor's office has established a business-education

clearinghouse that coordinates and facilitates school-business partnerships at the state, district, and school building level. Other reform efforts include changes in the teacher tenure and certification systems, the development of choice legislation, and the development of a statewide initiative to improve curriculum, instructional delivery, and student outcomes in technology, math, and science education.

A Governor's cabinet council was created to coordinate services to families. A planned result is the establishment of comprehensive family centers in schools. With a focus on prevention rather than intervention, these centers could provide a single entry point for well-child health care, job training, parenting resources, and social services. Invoking a 1915 law, the Governor intervened in labor negotiations and prevented a strike by Denver teachers, conducted hearings, and produced a new contract based on collaborative decisionmaking.

Connecticut

Connecticut's efforts to reform schools have primarily focused on goals, assessment, and teacher licensure. State-developed curriculum frameworks are based on the learning outcome goals and are integrated with new assessment systems. The state has developed a comprehensive performance-based mastery test focusing on problemsolving, as well as a district and school profile that will serve as a public report card. The Urban Focus program will concentrate on providing the department's technical resources to targeted cities who are most in need of assistance.

Improving the teaching profession has been the centerpiece of the state's approach to reform. Through the implementation of the Education Enhancement Act, educators receive higher salaries and improved in-service training. Connecticut is ensuring the highest possible quality of teaching through added support, training, and evaluation of those in the teaching profession. New teachers are assigned an experienced teacher to serve as a mentor and are visited by an assessment team throughout the year. In addition, teachers' professional certificates must be renewed every five years. School board training is also provided.

Delaware

Efforts are being made in Delaware to expand current restructuring initiatives. Ten percent of public schools participate in Re:Learning, but state leaders are concerned about ways in which Re:Learning can have a broader impact. The Delaware Board of Education and State Department of Public Instruction are utilizing the technical assistance of the National Association of State Boards of Education and a DuPont human resources expert to restructure the state department to enable it to strengthen its leadership role and provide technical assistance to school districts. The growing awareness that ongoing training bolsters restructuring activities has led to the development of programs such as TREK, a creative staff development project that teaches school-level teams how to instigate change. DuPont, the Business Roundtable, and other businesses are promoting educational change through partnership efforts, which include management training and staff development courses for school faculty. To spur reform, Delaware's Department of Public Instruction is releasing school profile reports, which contain input and outcome data for all high schools and middle schools. Plans call for developing profile reports next year for elementary schools.

Florida

Having developed new instructional programs and goals, and assessment and accountability systems, the state of Florida is considering new ways to promote systemwide restructuring. Writing tests are being developed. The state legislature appropriated $5 million for instructional technology in 1990, and every school has been offered a videodisc player. Districts that create model technology schools and teaching programs will be awarded grants by the state education agency. By loaning facilitators to specific sites, the agency has been instrumental in helping schools develop school improvement plans. Math and science partnerships are promoted at the agency's annual symposium for businesses, schools, and postsecondary institutions. This collaborative theme is further demonstrated by the agency's work with the department of health and rehabilitation services to develop a strategic plan for creating full service schools. Incentive grants and staff training are offered to schools that set up health and social service clinics. The principal licensure process in Florida is now competency based. Each school district must have a system to screen, select, and appoint principals. Professional development programs and performance-based appraisal systems for principals must also be in place.

Georgia

Georgia has been implementing the Quality of Basic Education Act since 1985. Recent reforms focus on reducing the amount of student assessment and requiring local superintendents to be appointed rather than elected. Certification authority was removed from the state department of education and placed in a separate, smaller agency in order to make it less restrictive. A task force is preparing an advisory report on legislation for a "pay for performance" salary plan for teachers. Pilot programs for voluntary pre-kindergarten for four-year-olds were funded in the 1992 budget, and a new emphasis will be placed on unifying programs for at-risk children in the early years. To fund these proposed changes, the legislature has approved the creation of a lottery, with the proceeds dedicated to education.

Hawaii

Hawaii's efforts continue to focus on school improvement, program innovations, and institutional change. School-based management was instituted to allow a school's community to directly contribute to the quality of education for its students. Forty-eight schools are involved in building working models for the community. The goal is 100 percent participation. An education superfund was established to provide $800 million from general funds for school facilities over the next ten years. Program innovations include "A+," the nation's first statewide program to provide affordable after-school care for latchkey children. Parent-community "networking centers" encourage parental involvement and are now present in 185 of the 237 schools. The Open Doors program provides financial assistance to make it possible for at-risk children to attend preschool classes. Plans are to expand the program statewide. On an institutional level, the state has operated as a single district. Now efforts are underway to restructure state and local education offices to complement site-based management efforts. The Governor has proposed lump sum budgeting to allow fiscal flexibility and has called for the creation of a Commission for Performance Goals to set student standards of achievement. A state-of-the-art, multi-vendor, open-architecture computer network facilitates communication between and among the schools and enables the state education agency to more readily respond to requests for technical assistance.

Idaho

The Governor has appointed a commission to define a new set of outcome goals and has proposed a series of initiatives to restructure early elementary education. He also has requested additional funds to develop new curriculum and assessment materials that focus on higher-order thinking skills for grades K-4. Other proposals targeted at the primary grades encourage districts to eliminate grade levels, retrain teachers, and reduce class size. The state is offering in-service training and incentive grants to teachers interested in revamping early elementary education. Idaho is currently the defendant in two school finance suits: one claiming the state's finance formula creates unfair discrepancies in per pupil expenditures and another claiming that the state should allocate more money to education.

Illinois

Illinois' education goals, which resemble the national goals, give direction to the state's education policy. The state's 1985 school reform legislation provided for the implementation of preschool programs for at-risk three- and four-year-olds. In addition to increased state support for the expansion of these programs each year, the state education agency has coordinated programs with other providers to produce more comprehensive family services. Today, some preschools have health services while others have adult literacy components.

Major school restructuring is an agency priority. The state currently has a network of accelerated elementary schools, a middle-level education initiative, and twenty Essential High Schools. Extensive assistance has been available for the Chicago Public Schools, where the state education agency with aid from the MacArthur Foundation has invited nearly 100 elementary and middle schools

that form the feeder patterns for the Essential High Schools to participate in a coordinated reorganization. Each participating high school receives a commitment of support for five years and each elementary and middle school has the opportunity to apply for special targeted school improvement funds. Additionally, the state education agency has solicited other corporate and business partnerships to enhance the restructuring efforts of individual schools.

Indiana

Over the past decade, the state has initiated a number of special programs—services for at-risk and gifted and talented youth, internships for beginning teachers, reduced class size for primary grades, and the Indiana Principal Leadership Academy—to enhance the quality of education. Indiana is now designing practical applications of the latest educational research theory. Heeding John Goodlad's premise that strengthened teacher education has a direct effect on school reform and renewal, the state has encouraged teacher education initiatives. The Education Commission of the States and Southwest Bell are hoping to provide incentive funds to universities that become professional development centers for elementary and secondary schools. The Schools for the 21st Century pilot program is now operating in ten sites. These schools receive regulatory flexibility if they propose plans to restructure curriculum and governance. In the Governor's Step-Ahead program, districts receive a block grant of state and federal monies to develop comprehensive service programs targeted to families. Efforts to expand these individual efforts through legislation have been delayed by budget problems.

Iowa

Working together, the business, education, and policy communities in Iowa have charted strategies for school transformation. The Business and Education Roundtable assessed the current state of education and drafted recommendations for World Class Schools in the state. Through Iowa's Education Excellence Program, more than 90 percent of all districts receive state grants for restructuring efforts. Proposals under the excellence program may be submitted in one of four areas: professional development, curriculum development, school transformation, and performance-based incentives. School choice is a new and growing program, but there is limited use of regulatory flexibility and waiver policies. The state is exploring the implications of changing the state education agency's role from regulatory to technical assistance. Included is the development of a performance-based accreditation system. Several grant programs focusing on coordinated health and social services have been established and targeted toward at-risk students.

Kansas

Kansas has adopted a new strategic plan for education, Kansas Schools for the 21st Century. An accrediting system will focus on school improvement, high standards of performance through an integrated curriculum, staff development, and a community-based education system. As part of the outcome-based accreditation, 50 districts and 150 schools are participating in a restructuring initiative that will combine human services at the school site. Regulations and rules will be lifted as districts demonstrate the need for waivers. A math improvement program has been developed based on the National Council of Teachers of Mathematics standards. The curriculum will be aligned with a new mathematics assessment instrument used to assess 90,000 students in grades three, seven, and ten. Teachers are being trained in the standards. A curriculum for communications skills also is under development. Four areas of the state are piloting a telecommunication system that serves schools, state agencies, higher education, and local businesses. The state department of education is adopting a nonhierarchical structure to help schools improve student achievement.

Kentucky

A finance equity legal case served as a catalyst for the development of one of the country's best examples of systemic restructuring. Kentucky is creating new assessment tools, has altered curriculum and professional development, and is designing an innovative accountability system with multiple components. Demonstrable outcome measures were established by the Council on School Performance Standards in July 1990. Changes include an accountability system that relies on independent learning, performance standards, and reporting to parents and the community. Schools will be given reward funds based on their rate of improvement over the previous two years. The new outcome goals have replaced the traditional curriculum so that "main ideas" will be the focus of a system stressing higher-order thinking and problemsolving skills. Textbooks will be replaced by original materials and guides, and students and teachers will use technology-equipped work stations. The state education agency is responsible for teaching all educators about the new law and providing training in school-based management. Ongoing professional development will be one of the agency's new assistance functions.

Louisiana

The Children's First Act, a comprehensive education bill enacted last year, resulted in significant changes in school accountability and teacher certification. The Louisiana State Department of Education now collects and publishes input and outcome data on each district and parish. The information is sent to parents and is used by the state for incentive grants. Districts are clustered into peer groups based on size and socioeconomic background. Within each cluster, districts demonstrating the most progress are given additional money from the state.

The Children's First Act also replaced teachers' lifetime certification with a periodic review process and a Model Career Option Plan. The Louisiana Education Association is currently challenging the constitutionality of revoking lifetime certificates. If upheld, the new system will require that each teacher be evaluated every five years on ninety-one indicators that are designed to measure the degree to which students are engaged in learning. The evaluations will be conducted by three-person teams of teachers and principals. Teachers who are given a superior rating may earn additional pay by becoming mentors for new teachers, serving as curriculum specialists, or joining evaluation teams.

Maine

Maine's Common Core of Learning, a document developed by a task force appointed by the Governor, describes the desired outcomes envisioned for all students. As a first step toward restructuring school systems, Maine is encouraging communities to use the Common Core of Learning as a springboard for local discussions about the need to change public education to prepare all students for the twenty-first century. Incentives for holding the dialogues and for developing restructuring plans are provided through the Innovative Education Grant Program. The 1991-92 Innovative Education Grant initiative was designed based upon lessons derived from the ten schools that received three-year restructuring grants starting in 1988. In June of 1991, ten high schools will be identified and awarded grants to explore using the nine principles of the Coalition of Essential Schools as the framework for their restructuring efforts.

In addition to this, a variety of other efforts are underway that are designed to accomplish the student outcomes described in the Common Core of Learning. Among them are the Coalition for Excellence in Education, a statewide partnership of individuals from business, education, and the community who are committed to fundamental change in education; the Southern Maine Partnership, a university and school collaborative designed to improve schools and teacher education; the Maine Aspirations Foundation, a joint business-state initiative to raise students' expectations and improve performance; the UNUM-school partnership, a business partnership with five school systems; pre-school programs for four-year-olds, three demonstration sites using the High Scope instructional model; and Challenge 2000, an Innovative Education Grant program aimed at improving student achievement in three school systems.

Maryland

Maryland's Schools for Success program uses an outcome-based approach to ensure that each student attends a school in which he or she can succeed. State staff, local boards, and the state board have a role in the unified effort. Ten outcome goals are guiding the initiative. High standards for the state's school system and individual schools have been adopted by the state board of education. Ratings of satisfactory or excellent are given for attendance, dropout rates, promotion rates, scores on criterion-referenced tests, and postsecondary decisions. Emphasis is placed on annual progress toward meeting state standards. A challenge grant program is planned to facilitate

the implementation of school improvement plans for reaching a satisfactory rating. If a school has outstanding performance results, it may apply for funding to serve as a regional staff development laboratory.

The state education agency has undergone an internal restructuring that focuses on quality management and provision of technical assistance. The agency also has created a Principal Assessment Center for administrators who wish to enroll in extensive training and evaluation. Comprehensive, coordinated, and integrated support service systems for students and their families have been established through interagency cooperation and partnerships with business, industry, and other public and private groups.

Massachusetts
In the 1980s the Massachusetts Department of Education encouraged school restructuring through technical assistance, pilot projects, and revised departmental policies. Now, the department is providing opportunities for educators to learn how to work in a restructured system. Teachers from disadvantaged communities can attend seminars to strengthen their mathematical reasoning and learn how to integrate new mathematics assessments to enrich their curriculum. Through a Turning Points grant, middle school teachers are being paired with local teacher education colleges to strengthen instruction and improve pre-service training. The department also is sponsoring seminars for superintendents on how to foster restructuring. The state board has disseminated publications that have demonstrated the need to eliminate the practices of grade retention and ability grouping

Michigan
Michigan's education reform focuses on four components: school improvement, a core curriculum, an annual report, and accreditation. The state adopted the national education goals and is using them to complement its own core curriculum. This curriculum is intended to provide a framework within which schools may examine the adequacy and relevance of their education programs. A model recommended by Michigan's State Board of Education will help local boards develop their own core curriculums geared toward reaching the established standards of quality. This set of learner outcomes focuses on higher-order thinking skills, problemsolving, and critical thinking in the various content areas. Every school must report to the public on seven educational components for the annual educational report. In support of this reform effort, Kellogg, K-Mart, Upjohn, and other businesses have offered to match state funds to coordinate social service programs. The money will be used to enrich student programs, train secondary school staff to effectively work with other agencies, and to develop multi-district programs in the areas of mathematics, science and technology.

One example of state-local cooperation is the development of the Michigan Model for Comprehensive School Health Education, which creates a partnership among the home, schools, community groups, and government agencies to educate all students on health and physical education issues articulated in the model core curriculum.

Minnesota
Minnesota has a comprehensive range of choice options available to its students: postsecondary enrollment for high school students, alternative educational opportunities for at-risk learners, and options for enrollment in a school outside a student's resident district. Minnesota has been identifying and revising its learner outcome goals since the 1970s. In the past few years, the Minnesota Department of Education has developed a broad array of model learner outcomes and a more refined subset of essential learner outcomes. In the reform plan, all districts are required to enhance the essential outcomes with their own objectives and to ensure that students master the entire set. By 2001, this commitment to the implementation of outcome-based education will be strengthened by having all school sites receive resources and support for developing challenging outcomes, instructional programs, and evaluation procedures. Accountability is provided through a state mandate that each district appoint a committee of educators and community members to report on local progress toward meeting their learner outcomes. Coordination of education, health, and social services is being encouraged at the state and local levels. School districts are provided incentives for consolidation through funding for new school facilities and planning grants.

Mississippi
The Mississippi BEST law is the centerpiece of educational reform in the state, but many of its programs are contingent on funding that has not yet been approved. Incentives are being offered to districts for improved student performance. Recent reforms have been targeted to the schools rather than the districts. School-based reform will be implemented by lifting selected state mandates and awarding grants to individual schools for increased student performance. Schools will apply for consideration as an Improving, Better, or Lighthouse School based on criteria that include student performance, student and teacher attendance, dropout rates, and parental and community involvement. In recent action, the legislature adopted provisions in BEST to allow the state to take over financially or academically bankrupt schools, to provide training for local school board members, to allow experts in various fields with non-education degrees to teach, and to create programs to screen certain three- and four-year-olds for physical and developmental problems.

Mississippi has a new program to allow every student access to computers for one hour every day. Through ongoing joint public-private funding, a Writing to Read computer lab has been installed in almost half of Mississippi's public schools to date. An important element of the program is computer training for teachers.

Missouri
In July 1990 the Missouri Board of Education published a set of outcome goals in a report titled Missourians Prepared: Success for Every Student. These goals will provide direction for the state's education system. The report recommends eliminating Carnegie units and implementing competency-based promotion. The Missouri Mastery and Achievement Tests (MMAT) are new criterion-referenced tests that are given to all fourth-, eighth-, and tenth-graders in the state. The test measures students against a set of core competencies. Each student tested receives his or her score, as well as building, district, and state averages. A career ladder gives teachers an opportunity to increase their salaries by enhancing performance.

The state has extensive programs to support at-risk children and their families. Parents as Teachers, a program of home visits and parent education activities designed to help parents prepare their children for school, is available to all families. Success is Homemade, Adults and Children Together, and Caring Communities are other programs that assist elementary and secondary schools in involving parents in schools and providing families with comprehensive services. In addition, the First Steps program coordinates services from the departments of education, health, mental health, and social services for families with children under the age of three with delayed development or diagnosed conditions associated with developmental disabilities. The Governor has proposed establishing a $1 million venture capital fund to support the most promising district strategies for improving student learning.

Montana
In 1986 the Montana Board of Public Education outlined a set of desired learner outcomes in each elementary and secondary curricular area. During the next eight years, districts are responsible for writing local curricula to address these learner outcomes and for developing assessment tools to measure student attainment. The board has had teacher education standards for many years; these standards outline competencies teachers must have in general education and specific teaching areas.

Based on a Supreme Court decision that Montana's system of funding its K-12 public schools was unconstitutional, the legislature passed and the Governor signed a 42 percent increase in funds for schools for the 1990 school year; this has allowed schools with below-average spending to close the gap on their higher spending counterparts. Two committees chaired by the Governor's education policy aide are discussing alternative certification and annual reports of success indicators. Montana received a five-year award from the National Science Foundation to restructure mathematics education. Plans are underway to

develop an integrated mathematics curriculum for grades 9-12 with accompanying materials including technological tools and applications. Teacher preparation and in-service programs are being redesigned to support the curriculum.

Nebraska

Nebraska is striving to create an education system that stresses quality learning, equity, and accountability. To provide greater leadership in this effort, the Nebraska Department of Education itself is restructuring to create a network of assistance and service. The agency has merged its units serving vocational and academic programs to reinforce the need for a coordinated curriculum and to move away from tracking practices. A school accountability bill under consideration by the legislature would create a commission to study and develop learner outcomes and methods of achieving them. Other efforts to review options for educational reform include the School Restructuring Commission, which is charged with reporting ways to implement systemic restructuring, the non-profit Nebraska Center for Excellence in Education, which is pursuing restructuring in the largest districts; and the Commissioner's Summit on Education, a day-long dialogue on reform issues. Guided by a blue ribbon panel of business leaders, policymakers, and educators, the statewide Mathematics Coalition received a National Science Foundation grant as part of its program to enrich curriculum, instruction, and assessment. The NEB*SAT long-distance learning network—a combined project of the Nebraska Educational Telecommunications Network, all postsecondary education sectors, participating school districts, and certain businesses—is expanding to provide learning and professional development opportunities in a cost-effective manner to a wide range of students. Further expansion of long-distance learning using a fiber optic network is being explored.

Nevada

Nevada passed accountability legislation during its 1989 session. This legislation requires school districts to submit a district-level report to the state superintendent and the legislature outlining district-level goals, student achievement scores, and fiscal information on an annual basis. The state board of education established a task force to review alternative methods of meeting high school graduation requirements. As part of the initiative to reduce class size, teachers are being trained to improve their instruction and gear it to these smaller classes. Teacher training is also focusing upon the new science and mathematics curriculum standards. Local school agencies are being helped to coordinate services to young people, including preventive health care, with other health and social service agencies. A state board ten-year plan for schools, developed in 1990, recognizes the importance of the national education goals and recommends state objectives to meet the goals. The Governor convened a state education summit in January 1990.

New Hampshire

To guide future action in New Hampshire's elementary and secondary schools, three areas have been designated by the New Hampshire Board of Education as top priority: the character of students, content in the curriculum, and student competency. Toward these ends, an assessment tool is being developed to shift the focus in education from how teaching is done to what students are learning. Home schooling has become a legal alternative to public education. The state board of education has reestablished a state policy that says all schools must refocus on character and citizenship. In its 1990-91 session, the New Hampshire legislature amended the constitution to dedicate all lottery revenue to schools and passed an alternative certification plan for teachers. The plan allows individuals to teach without an education degree. Currently, the school finance formula is under review.

New Jersey

In response to a court finding of large disparities in per-pupil expenditures among districts, the Governor proposed and the legislature passed a controversial school finance plan to equalize spending. State aid will be redirected to the poorest districts; local expenditures on education will be capped. The Governor has appointed the president of Teachers' College, Columbia University and the CEO of New Jersey Bell to head a commission to study school reform and make recommendations to address issues of quality, equity, and efficiency.

New legislation requires state standards to be set in all core subject areas and the creation of a state Task Force on Assessment and Monitoring. The task force will review state standards for district certification and recommend revisions to the state board of education. The new standards will take effect in the 1992-93 school year. The Governor also has proposed the creation of an Office of the Inspector General to investigate waste and abuse in the public schools and an enforceable code of ethics for school board members and school administrators. Both measures are before the legislature.

New Jersey's alternate route to teacher certification now attracts 40 percent of new teachers. Preliminary research indicates that these teachers are more qualified and are staying longer than those from the traditional route. The state is looking for ways to strengthen the mentoring program for alternate route teachers. New Jersey also is working with the business community to issue a new school district report card, launch a $2 million initiative to improve instruction in mathematics and science, and strengthen the coordination of services to families and children.

New Mexico

Several models of education reform are being implemented in New Mexico. Accelerated instruction, focus on middle schools, the Re:Learning pilot program, and the 21st Century Schools Program are all directed toward creation of a performance-based system. With fifty schools at all levels designated as Re:Learning schools, New Mexico is a leader in this restructuring strategy aimed at increasing student involvement in the classroom and staff involvement in redesigning the system. Through Eastern New Mexico University (ENMU), participating teachers can receive credit and become part of a computer-linked network. ENMU and the state education agency are working with schools, colleges, and universities to develop performance assessment systems. An accountability report card for school districts, first used in 1990 and now being refined for use in fall of 1991, will reinforce this outcome orientation. It covers mandated test results, college exam scores, spending, dropout rates, and results of a quality of education survey for parents.

Schools may spend their textbook funds on technology and other resources. Other discretionary funding is provided through the 21st Century Schools Program. The state has designated $3 million to $4 million for grants to extend the school year, develop more teacher training, and provide after-school enrichment programs. Business has supported the state education agency's attempt to alter its organization to focus on supporting the student. Under the initiative of the Governor's office, the state education agency and local school districts are linking school and human service agencies. The Governor's office is also leading an effort to strengthen preschool opportunities.

New York

With the Governor's support, the New York Board of Regents has adopted a New Compact for Learning. The compact sets clear goals, provides support and procedural freedom, and invites people in all parts of the system to exercise initiative in making desired improvements. This approach has been characterized as "top-down support for bottom-up reform."

The compact sets forth statewide goals for elementary and secondary education and a set of strategic objectives to focus New York's efforts and to enable assessment of progress. The compact and the new system to which it gives rise are based on six fundamental principles: 1) all children are capable of learning and contributing to society; 2) minimum competence is not enough; 3) equity of outcome, not equality of input, is required; 4) the energies of participants should be on results; 5) each participant should be accountable for achieving those desired results; and 6) successes should be rewarded and failure remedied.

The compact seeks to change the system so that it produces the desired results by harnessing the energies of all participants in a cooperative endeavor behind shared purposes. The framework for this endeavor includes roles for the state, the student, the parent, the teacher, the pupil support team, the superintendent of schools, the board of education, the region, higher and continuing education, libraries and other cultural institutions, and business, industry, and labor.

North Carolina
Senate Bill 2, the North Carolina School Improvement and Accountability Act, gives school systems opportunities for far greater flexibility in developing curriculum, establishing merit pay incentives, and determining priorities in return for meeting certain performance measurements. Districts must form a planning committee to set up strategies for achieving local and state performance goals that include attendance, test scores, and parental involvement. Schools that meet the goals are rewarded with additional funds, including allotments for bonus salary increases. The North Carolina Department of Public Instruction is developing criterion-referenced tests based on outcome goals. It also is redefining the desired competencies as necessary. The Governor convened his staff, state board members, administrators from the University of North Carolina, and community colleges, legislators, and business leaders to discuss ways to better coordinate resources with the public schools. An extended day has been piloted in sixteen schools. This extension provides time to offer academic classes, labs, clubs, tutoring, cultural arts, and foreign language instruction. Other recommendations by the Governor include increasing graduation requirements, decreasing class size in kindergarten through third grade, strengthening the academic core in both the college preparatory track and the new technical preparatory track, consolidating categories of state aid, and decentralizing school finance. The Governor has declared 1991 the Year of the Worker and has requested funds to enhance workforce preparedness, JTPA, and the community college system.

North Dakota
North Dakota's Education Action Commission was created by the Governor to develop state goals and to focus on three significant issues: quality, restructuring, and finance. The commission studied national goals and trends, issues, and improvement strategies. It identified current efforts in North Dakota directed to improvement. An action plan was developed through eight public hearings and consensus sessions with critical leaders. North Dakota's Children's Services Coordinating Committee continues to promote interagency collaboration.

As a result of the 1991 legislative assembly, the state department of education will research and initiate activities to prepare for the development of student performance standards, program assessment, and nonbinding guidelines to assist school boards in the development of policies and plans related to participatory school decisionmaking. Funding was increased to broaden the consortia program, which provides incentives to share administration and curriculum/teaching endeavors among school districts that are leading toward the reorganization of these districts.

Ohio
The Ohio State Board of Education adopted a strategic plan in 1990 that outlines specific outcomes with definite timelines. An education management information system (EMIS) has been set up to facilitate data collection and promote accountability. The first public report card based on this data will be released in the fall of 1992. The state department of education is setting criteria to evaluate the extent to which districts are meeting state standards. Academically deficient districts must submit corrective action plans and face the prospect of being taken over, while excellent districts are eligible for waivers. High school proficiency tests, which all students must pass in order to graduate, will be put in place this year.

Pilot programs are linking schools with higher education institutions in order to both deliver education more effectively and improve the college attendance rates of minority students. All districts are required to appoint business advisory councils that will recommend curricular changes to improve students' employability skills. A program to work with parents of students in preschool through grade twelve, Training Ohio's Parents for Success, is being implemented at the district level. Inter- and intra-district choice policies will be fully implemented by 1993. The Governor has established the Governor's Education Management Council as a vehicle to involve the private sector in the formation of state education policy.

Oklahoma
The passage of an education reform package in 1990, H.B. 1017, has set the stage for school improvement in the state. The legislation eliminated Carnegie units for high school graduation; instead, each student will be required to meet defined competencies at each level of schooling. Schools will have greater flexibility in developing and selecting instructional materials. Criterion-referenced tests will be developed and must be passed by high school seniors graduating in 1992. An office of accountability will monitor districts' compliance with H.B. 1017, recommend corrective actions, and produce an education indicators report for the state. An incentives program includes funds for districts to consolidate voluntarily, pilot projects for school-site management, and deregulation for high-performing schools. Low-performing districts risk loss of funds, loss of accreditation, and, ultimately, state takeover or closing of schools. An academically based incentive pay system is being created. H.B. 1017 requires elementary and middle school students to take a second language and requires all schools to offer early childhood programs. The goals for the newly restructured state department of education include leadership, service, and deregulation.

Oregon
Oregon has shifted from an inputs focus to an outcomes focus for education improvement, including less regulation. An outcomes assessment system was implemented in spring 1991. Results will be reported by schools and will help identify targets for improvement. Changes in accreditation, including performance indicators, are under consideration. Linkages between assessment, accountability, and curriculum are provided through the instructional improvement cycle.

A statewide distance learning initiative, intended to assist in equalizing opportunities for rural areas, is in its first year of operation. Oregon has implemented a policy that allows school systems to waive state mandates under certain conditions. Social service agencies and education systems in some communities collaborate to meet the needs of children through an integrated service delivery system. The state department of education facilitates learning through the dissemination of promising practices, and building research and instructional teams to assist schools and districts. In the fall of 1990, Oregon voters passed a property tax limitation measure that will result in the need for enhanced state revenues and a revision in the school finance formula.

Pennsylvania
Pennsylvania's current education reform agenda focuses on rewarding improved performance by individual schools, strengthening the role and professional status of teachers, and improving the quality of teaching and learning through school restructuring. In 1987 the commonwealth enacted the Pennsylvania School Performance Incentive Program, which awards $5 million annually in cash grants to individual schools that make significant improvements in math and reading achievement, dropout reduction, and college preparation. The program ensures teacher involvement in determining how each cash award is reinvested to promote further educational improvement. The state also increased the minimum teacher salary for the first time in twenty years and established an urban and rural teacher loan forgiveness program, leading thousands of new teachers to teach in economically depressed and underserved urban and rural schools. Regional Lead Teacher Centers promote programs in hundreds of school districts that give teachers a greater voice over the direction of their schools and the chance to work with other teachers and educators. The state also has joined the Coalition of Essential School's Re:Learning project, with twenty-five schools currently involved.

Rhode Island
Rhode Island has adopted education goals that are similar to the national goals. These goals include a call for statewide literacy. A new literacy act provides students in kindergarten through grade three with integrated literacy instruction and supplementary assistance for those requiring it. Two "Governor's Schools" have been designated on the basis of their exemplary local responses to meeting the needs of their students. Both schools have fostered strong parental involvement and school-site management. Fifteen schools currently are studying or implementing school site management concepts. The state also is studying ways to improve the education of middle grade students

with assistance from the Carnegie Corporation. The main aim is to review policy to eliminate barriers to educational improvement and restructuring. A new statewide Middle Level Educators Association will serve as a policy advising body. Rhode Island is one of seven states involved in the Re:Learning project. In order to fulfill the state's obligation to provide quality education, the state has assumed control of a local school district upon the district's request.

South Carolina

South Carolina has sustained a fifteen-year focus on and a commitment to education improvement and reform. In 1984, in a major effort to emphasize accountability and incentives for change, the Education Improvement Act was adopted by the legislature. In 1989 the Governor called for additional opportunities for school and district flexibility and deregulation in return for greater accountability for results. This legislation was adopted as Target 2000.

In 1990 a new state superintendent of education was elected, campaigning on an agenda that included a "blueprint for action," which is based on a commitment to the national education goals and calls for maximum outcomes rather than "basic skills" minimums. South Carolina is moving toward greater emphasis on complex problemsolving and thinking skills, quality preschool and early childhood education, professional teacher development, parent training, and parent involvement.

South Carolina is beginning to create school-based incentives and a more demanding curriculum to be linked to performance assessment. All education stakeholders will take part in a Curriculum Congress to develop frameworks intended to drive change in teacher preparation, finance, accreditation, assessment, and accountability. The state education agency plans to reorganize in order to provide improved services and technical assistance to all schools.

South Dakota

The Governor's plan to modernize the state's school system, beginning with eight pilot sites, has been approved by the legislature. The curriculum will be reorganized and expanded and learning methods will be updated. A revitalized curriculum will emphasize relevancy to work, a shift from passive to active instruction, and multi-cultural activities. New performance assessment tools will be developed to demonstrate student competency on complex knowledge and skills. Schools will be relinked to their communities in order to increase parental involvement and improve access to services for use in the families. In addition, school report cards are being developed in selected pilot sites and will be released in November 1991. A task force is studying the potential for a statewide telecommunication system to be utilized by schools, higher education, government, and communities. The national education goals helped to provide a forum for school improvement in the state.

Tennessee

The Education Reform Act of 1991 is currently before the legislature. Most elements of the bill have been piloted and are now being proposed for statewide adoption. The bill calls for fundamental change in the education system. It would link school finance reform with education reform in an effort to better equalize funding and to secure needed revenues for educational improvement. A "value-added" assessment program is proposed to provide annual information on each student, class, and school system in the state. Performance indicators would group school systems on like characteristics and would set standards for assessment. Rewards and sanctions would be tied to the assessment system. School districts that meet outcome goals could receive a maximum of 5 percent in additional funding. If standards are not met after a probationary period of two years, the school superintendent and board can be ousted.

Also proposed is the addition of core course requirements in science, social studies, and writing, and an upgraded proficiency exam for high school graduation. An exit exam for work readiness is being considered for vocational education students. The legislation also would allow ungraded primary classes and "classrooms for the 21st century"—cutting edge technological classrooms and teacher training.

Texas

Texas changed its accreditation process for schools to a performance-based approach three years ago. In addition to adopting a new statewide norm-referenced test, the state also will issue school-based performance reports beginning in the fall of 1991; a Governor's award program will base its selections on the indicators in the report cards. Site-based management gives principals and teachers the authority over the expenditure of incentive funds distributed under the Governor's Educational Excellence Program. Districts that are academically unaccredited for more than two years may face sanctions, which include state management or consolidation.

Major curriculum changes have been made in science, math, English language arts and reading, and, in the near future, social studies programs. These changes are being implemented only when textbook materials are made available to school districts to address the revisions. In addition, an extensive staff development effort is being planned to train science teachers to stress more thematic, hands-on concepts. All curriculum areas are placing greater emphasis on higher-order thinking and problemsolving skills.

Educational technology, including adoption of electronic instructional media systems, is a major priority for the state. Recent legislation also requires the state department of education to collaborate with other agencies in the coordination of services. These reforms are taking place as a major restructuring of the state school finance system is being implemented under court order.

Utah

A statewide strategic planning process incorporating the national education goals is being implemented through state and local action plans in Utah. One of the recommendations is to develop individualized education plans for every student. Since 1985 Utah has been implementing a statewide core curriculum. Criterion-referenced assessments have been developed to determine to what extent schools are meeting curricular objectives. Public report cards that measure district performance against expected scores are issued to each patron in a school district and are reported statewide. Eligible districts that meet minimum standards receive their state funding through a block grant, while the Governor's Schools of Excellence program provides monetary awards annually to twenty outstanding schools.

Districts are being encouraged to develop cooperative learning strategies. School-site interagency coordinating committees will address issues for at-risk youth. A four-year technology project will invest approximately $50 million per year in education technology, partially to assist teachers. A career ladder program has been an effective tool to increase teacher professionalism in the state. An alternative route to teaching has been developed through cooperation among districts, schools, and universities.

Vermont

Vermont has adopted state performance goals for education. Local review by students, parents, the state board of education, and the legislature during the public process of developing the goals has fostered community involvement in education as well as an integrated approach to restructuring. Developing assessment methods that focus on higher level skills has been one of Vermont's primary efforts. Collections of samples of students' best work, called portfolios, are now in the pilot stage in math and writing courses for fourth- and eighth-graders and will soon be expanded to science and social studies. To reinforce this performance orientation, businesses, through the leadership of the state's Business Roundtable, will require a review of high school graduates' portfolios before offering them employment. The state also is providing challenge grants through the Reinventing Schools program to schools undertaking restructuring efforts. Schools are being encouraged to eliminate ability grouping of students for instructional purposes and to stress higher-order thinking skills. The state education agency is changing its orientation to service delivery, and the presidents of teacher training institutions will develop plans for restructuring their programs by September 1991.

Virginia

The state is at the initial stages of developing a decentralized education system that focuses on student performance. The restructured state department of education reflects this orientation. The department is moving toward a research-based organization and away from a regulatory approach.

Pilot projects will be used to test research ideas. The Outcome Accountability Project, which reports performance data on Virginia schools and school districts, was initiated in 1991 and will be developed further in 1992. Working with the state board of education, the Governor is developing an education reform package that builds upon the national education goals and other initiatives that the state began prior to the development of the national goals.

Recent educational reforms in Virginia include: the Literacy Passport Testing Program, which requires all students to pass basic skills tests in reading, writing, and mathematics before high school; the restructuring of teacher education programs to require teachers to earn a bachelor's degree in the liberal arts; the reform of education in the middle grades; a point-based recertification system that offers experienced teachers more options to upgrade their professional skills; and a six-year technology plan to develop instructional computing, distance learning, electronic communications networks, and automated data reporting.

Washington

Washington State's $10 million pilot, Schools for the 21st Century, now involves thirty-three projects. In the six-year pilot program, the state has waived regulations and rules in exchange for accountability at the local and school level. Staff development, curriculum, governance, and resources are all linked in this effort. Pending legislation would build upon this model, transferring decisionmaking to the school level and stressing outcomes on the premise that all students can learn. Graduation Carnegie Unit requirements would be replaced by competencies and certificates of initial mastery of skills. School boards would be required to prove that children have reached levels of competency. To encourage these changes, teachers would be empowered to design their own budgets and programs, and the state would offer support through flexibility and technical assistance from the state education agency. New teacher education requirements also are being phased in to eliminate the undergraduate education degree. Teachers must have a liberal arts degree for initial certification and a liberal arts or Master in Teaching degree for "professional" permanent certification.

West Virginia

The West Virginia Board of Education established seven education goals that include ensuring equal opportunity for all students, fostering professional development of school personnel, and creating schools that are centers for lifelong learning and community service. A change in the orientation of the West Virginia education system began in 1988 with the creation of a performance-based accreditation system. Any school improvement council may request a waiver of policies, superintendent's interpretations, and laws in order to improve instruction and maintain or reduce cost. Low-performing schools are subject to review; consistently deficient schools may be taken over by the state. A criterion-referenced test is being developed to measure student progress on expected basic skills curricular outcomes. School, district, and state report cards have been instituted.

The state expects to provide computers for every classroom as well as create a regional computer information system. Legislation passed in August 1990 requires the establishment of a management and evaluation training program for principals, a formal system of personnel evaluation, and a teacher internship program. A Center for Professional Development will assist local staff development efforts. A new cabinet on children and families will have the power to shift money from one agency budget to another to improve interagency coordination.

Wisconsin

Wisconsin broke new ground last year by enacting legislation to allow a select number of economically disadvantaged students in Milwaukee to attend a private nonsectarian school of their choice at no cost. Proposals have been made to expand this program on a pilot basis. As a follow-up to the Education Summit in Charlottesville, a broad-based education reform commission was established in 1989 to consider changes in the Wisconsin education system. The Commission on Schools for the 21st Century proposed creating "schools capable of continuous improvement," and the Governor included key recommendations from the commission's report as part of his proposals to the legislature. The outcome-focused education system envisioned by the commission includes establishing a permanent education goals board to monitor progress in every school and district, offering a choice of schools, assessing of higher-order skills, aligning performance-based assessment with a strengthened curriculum, rewarding schools that improve, providing assistance to low-performing schools, redesigning teacher training toward an outcome-based education system, creating site-based management, and improving professional development. Students would be required to demonstrate mastery of core high school subject matter by the end of the tenth grade. Existing education for employment programs would be strengthened. Wisconsin's current effort to integrate services for at-risk children would be continued. The future of the commission's recommendations remains uncertain.

Wyoming

Wyoming is in the process of implementing outcome-based accreditation standards adopted by the state board of education in 1990. Annual school district report cards are now required, but information will not be comparable from district to district. The Governor has proposed and the legislature has approved a $50 million Centennial Education Trust Fund to fund innovative education programs to be divided between schools, community colleges, and the university. The fund will encourage restructuring efforts and new partnerships among students, parents, teachers, businesses, and communities. A new university-school partnership is being developed to link teachers throughout the state with the University of Wyoming. It is affiliated with John Goodlad's Center for Educational Renewal. An Institute for the Development of Teaching at the university provides professional development opportunities. The legislature adopted state goals for education based on the national education goals.

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